

Louisville Metro Air Pollution Control District 850 Barret Avenue Louisville, Kentucky 40204-1745



Title V Operating Permit

Permit No.: 27755-14-TV Plant ID: 36

Effective Date: 7/30/2014 Expiration Date: 7/31/2019

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Clariant Corporation (Louisville West Plant) 1227 South 12th Street Louisville, KY 40210

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than six (6) months prior to the expiration date.

Application Received: 4/7/2007

Permit Writer: Karen Thorne

Administratively Complete: 6/6/2007 Public Notice Date: 6/14/2014 Proposed Permit Date: 6/14/2014

> Air Pollution Control Officer July 30, 2014

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Operating Permit History

This facility was previously permitted under a FEDOOP permit. This is the initial Title V permit for this facility.

Title V Permit 27755-14-TV Revisions

Revision No.	Date of Issuance	Public Notice Date	Туре	Emission Unit	Description
Initial	7/30/2014	06/14/2014	Initial	Entire permit	Initial permit issuance

FEDOOP Permit 0073-97-F Revisions

Revision No.	Date of Issuance	Public Notice Date	Туре	Emission Unit	Description
4	08/15/2003	06/08/2003	Renewal	Entire permit	Permit renewal
3	07/13/2000	06/18/2000	Minor	5-98, 6-98, 7-98, 55-00, 63-00	Attachment added
2	06/20/2000	05/14/2000	Administrative	Entire permit	Name change
1	05/30/2000	03/05/2000	Minor	General Conditions (GC), pp. 2-	Incorporate revisions to GC 4, 11, 12, 13 and add new GC 13 and 14.
NA	04/22/1997	07/16/1997	Initial	Entire permit	Initial permit issuance

Abbreviations and Acronyms

AP-42 - AP-42, Compilation of Air Pollutant Emission Factors, published by U.S.EPA

APCD - Louisville Metro Air Pollution Control District

BAC - Benchmark Ambient Concentration

Btu - British thermal unit

CEMS - Continuous Emission Monitoring System

CFR - Code of Federal Regulations

CO - Carbon monoxide

District - Louisville Metro Air Pollution Control District

EA - Environmental Acceptability

gal - U.S. fluid gallons GHG - Greenhouse Gas

HAP - Hazardous Air PollutantHCl - Hydrogen chloride

Hg - Mercury
hr - Hour
in. - Inches
lbs - Pounds
l - Liter

LMAPCD - Louisville Metro Air Pollution Control District

mmHg - Millimeters of mercury column height

MM - Million

NAICS - North American Industry Classification System

NO_x - Nitrogen oxides PM - Particulate Matter

PM₁₀ - Particulate Matter less than 10 microns PM_{2.5} - Particulate Matter less than 2.5 microns

ppm - parts per million

PSD - Prevention of Significant Deterioration

psia - Pounds per square inch absolute

QA - Quality Assurance

SIC - Standard Industrial Classification

SIP - State Implementation Plan

SO₂ - Sulfur dioxide

STAR - Strategic Toxic Air Reduction

TAC - Toxic Air Contaminant

UTM - Universal Transverse MercatorVOC - Volatile Organic Compound

w.c. - Water column

year - Any period of twelve consecutive months, unless "calendar year" is specified

yr - Year, or any 12 consecutive-month period, as determined by context

Preamble

Title V of the Clean Air Act Amendments of 1990 (the Act) required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are: (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD or APCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations."

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements that are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the General Conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The owner or operator's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

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General Conditions

1. <u>Compliance</u> - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State, and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. [Regulation 2.16, sections 4.1.3, 4.1.13.1, and 4.1.13.7]

2. <u>Compliance Certification</u> - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, section 4.3.5.4, at the following addresses:

US EPA - Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960 Air Pollution Control District Room 205 850 Barret Ave Louisville, KY 40204-1745

This certification must be postmarked by 15 April of the year following the year for which the certification is being submitted, or other such due date as required by another applicable regulation.

- 3. <u>Compliance Schedule</u> The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
 - Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
- 4. **<u>Duty to Supplement or Correct Application</u>** If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

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5. Emergency Provision

a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations if the conditions in Regulation 2.16 are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An emergency occurred and that the owner or operator can identify the cause of the emergency;
- ii. The permitted facility was at the time being properly operated;
- iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
- iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. [Regulation 2.16, sections 4.7.1 through 4.7.4]
- 6. <u>Emission Fees Payment Requirements</u> The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 1.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. [Regulation 2.08, section 1.6]
- 7. <u>Emission Offset Requirements</u> The owner or operator shall comply with the requirements of Regulation 2.04.
- 8. <u>Enforceability Requirements</u> Except for the conditions that are specifically designated as "District-Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. [Regulation 2.16, sections 4.2.1 and 4.2.2]

9. Enforcement Action Defense

a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. [Regulation 2.16, sections 4.1.13.2 and 4.1.13.3]

- 10. <u>Hazardous Air Pollutants and Sources Categories</u> The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- 11. <u>Information Requests</u> The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. [Regulation 2.16, section 4.1.13.6]

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address shown in General Condition 35.b. [Regulation 2.07, section 10.2]

- 12. **Insignificant Activities** The owner or operator shall:
 - a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. [Regulation 2.16, section 5]
 - b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. [Regulation 2.16, section 4.3.5.3.6]
- 13. <u>Inspection and Entry</u> Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

 [Regulation 2.16, section 4.3.2]
 - a. Enter the premises to inspect any emissions-related activity or records required in this permit.
 - b. Have access to and copy records required by this permit.
 - c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
 - d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.
- 14. Monitoring and Related Record Keeping and Reporting Requirement The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be 1 January through 30 June and 1 July through 31 December of each calendar year. All reports shall be sent to the District at the address shown in paragraph 2 of these General Conditions and must be postmarked by the 60th day following the end of each reporting period, unless specified elsewhere in this permit. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement

purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

Reporting Period Report Due Date

January 1 - June 30 August 29

July 1 - December 31 March 1 of the following year

If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

- 15. <u>Off-permit Documents</u> Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, section 5. [Regulation 2.16, section 4.1.5]
- 16. **Operational Flexibility** The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
- 17. <u>Permit Amendments (Administrative)</u> This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.
- 18. Permit Application Submittal The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
- 19. **Permit Duration** This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
- 20. <u>Permit Renewal, Expiration and Application</u> Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
- 21. **Permit Revisions** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [Regulation 2.16, section 4.1.16]
- 22. **Permit Revision Procedures (Minor)** Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
- 23. <u>Permit Revision Procedures (Significant)</u> A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance

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- and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
- 24. **Permit Termination and Revocation by the District** The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:
 - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment;
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District;
 - c. Knowingly making any false statement in any permit application;
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
- 25. **Permit Shield** The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
- 26. **Prevention of Significant Deterioration of Air Quality** The owner or operator shall comply with the requirements of Regulation 2.05.
- 27. **Property Rights** This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
- 28. <u>Public Participation</u> Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
- 29. **Reopening For Cause** This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
- 30. **Reopening for Cause by EPA** This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
- 31. Risk Management Plan (112(r)) For each process subject to section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
- 32. <u>Severability Clause</u> The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. [Regulation 2.16, section 4.1.12]
- 33. <u>Stack Height Considerations</u> The owner or operator shall comply with the requirements of Regulation 2.10.
- 34. <u>Startups, Shutdowns, and Upset Conditions Requirements</u> The owner or operator shall comply with the requirements of Regulation 1.07.

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35. Submittal of Reports, Data, Notifications, and Applications

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:

Air Pollution Control District Room #205 850 Barret Ave Louisville, KY 40204-1745

b. Documents that are specifically required to be submitted to EPA, as set forth in Regulation 2.16 sections 3.3 and 5.8.5 shall be mailed to EPA at:

US EPA - Region IV APTMD - 12th floor Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-3104

36. Other Applicable Regulations - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements

Regulation	Title
4.07	Episode Reporting Requirements
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

District Only Enforceable Regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.00	Definitions
5.01	General Provisions
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

- 37. Stratospheric Ozone Protection Requirements Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:
 - a. Any facility having any refrigeration equipment that normally contains fifty (50) pounds of refrigerant or more must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added, according to 40 CFR 82.166;
 - b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
 - c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
 - d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances

(except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. [Regulation 2.16, section 4.1.5]

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Source-Wide Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$, NO_X and VOC

The owner or operator shall not allow or cause the *plant-wide* PM emissions to equal or exceed 100 tons during any consecutive 12-month period. (Regulations 2.04 and 2.05)

b. **Opacity**

The owner or operator shall not allow or cause visible emissions to equal or exceed twenty percent (20%) opacity. (Regulation 7.08, section 3.1.1 and Regulation 6.09, section 3.3.1)

c. HAP

- i. The owner or operator shall not allow or cause the *plant-wide* emissions of any single HAP to equal or exceed 10 tons during any consecutive 12-month period.
- ii. The owner or operator shall not allow or cause the *plant-wide* total HAP emissions to equal or exceed 25 tons during any consecutive 12-month period.
- iii. *Management Practices*. The owner or operator shall comply with the following paragraphs. (40 CFR 63 Subpart VVVVV)
 - Each process vessel must be equipped with a cover or lid that must be closed at all times when it is in metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form). (40 CFR 63.11495(a)(1))
 - The owner or operator must conduct inspections of process vessels and equipment for each CMPU in metal HAP service, as specified in the following paragraphs to demonstrate compliance with \$1.c.iii.1) and to determine that the process vessels and equipment are sound and free of leaks. (40 CFR 63.11495(a)(3))
 - (a) Inspections must be conducted at least quarterly. (§63.11495(a)(3)(i))
 - (b) For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period. (§63.11495(a)(3)(ii))

(c) Inspections must be conducted while the subject CMPU is operating. (§63.11495(a)(3)(iv))

- (d) No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required. (§63.11495(a)(3)(v))
- The owner or operator must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph, a leak will be considered "repaired" if a condition specified in one of the following paragraphs is met. (40 CFR 63.11495(a)(4))
 - (a) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or (§63.11495(a)(4)(i))
 - (b) No bubbles are observed at potential leak sites during a leak check using soap solution, or (§63.11495(a)(4)(ii))
 - (c) The system will hold a test pressure. (§63.11495(a)(4)(iii))
- The owner or operator must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair. (40 CFR 63.11495(a)(5))
- iv. Startup, shutdown, and malfunction (SSM) provisions in subparts that are referenced in 40 CFR 63.11495(a) and (b) do not apply. (40 CFR 63.11495(c))
- v. General duty. At all times, the owner or operator must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU. (40 CFR 63.11495(d))
- vi. Emissions from metal HAP process vents. For all metal HAP process vents from each CMPU with collective uncontrolled metal HAP emissions equal to or greater than 400 lb/yr, the owner or operator shall reduce collective uncontrolled emissions of total metal HAP emissions by ≥95 percent by weight by routing emissions from a sufficient number of the metal process vents through a closed-vent system to any combination of control devices, according to the requirements of §63.11496(f)(3). The requirements of this paragraph §63.11495(f) do not apply to metal HAP process vents from CMPU containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form). (40 CFR 63.11495(f) and Table 4)

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d. TAC

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21) (See Comment 1.)

S2. **Monitoring and Record Keeping** (Regulation 2.16, Sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

- i. For each VOC emission point, the owner or operator shall monitor and maintain records of the throughput of acetic acid and any other VOC containing materials during each calendar month.
- ii. The owner or operator shall calculate and record the *plant-wide* consecutive 12-month VOC emissions for each month in the reporting period.

b. $PM/PM_{10}/PM_{2.5}$

- i. For each PM emission point, the owner or operator shall monitor and maintain records of the throughput of each raw material during each calendar month.
- ii. The owner or operator shall calculate and record the *plant-wide* consecutive 12-month PM₁₀/PM_{2.5} emissions for each month in the reporting period.

c. Opacity

- i. For each referenced PM emission point, the owner or operator shall conduct a monthly one-minute visible emissions survey during normal process operation and daylight hours of each PM emission point. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is wholly within a building.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 within 24 hours of the initial observation.
- iii. The owner or operator shall maintain monthly records of the results of all visible emissions surveys and Methods 9 tests performed. The records shall include the date of each survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

d. NO_X

The owner or operator shall calculate and record the *plant-wide* consecutive 12-month NO_X emissions for each month in the reporting period.

e. HAP

- i. For each HAP emission point, the owner or operator shall calculate and record the monthly throughput of each HAP-containing raw material and the HAP content. HAP content in both base metal form and compound form shall be kept for HAP compounds.
- ii. The owner or operator shall calculate and record the *plant-wide* consecutive 12-month emissions of each single HAP and total HAP for each month in the reporting period.
- iii. The owner or operator must determine the sum of metal HAP emissions from all metal HAP process vents within a CMPU subject to 40 CFR 63 Subpart VVVVVV, except you are not required to determine the annual emissions if you control the metal HAP process vents within a CMPU in accordance with Table 4 of Subpart VVVVVV or if you determine your total metal HAP usage in the process unit is less than 400 lb/yr. To determine the mass emission rate you may use process knowledge, engineering assessment, or test data. You must keep records of the emissions calculations. (40 CFR 63.11495(f)(1))
- iv. If your current estimate is that total uncontrolled metal HAP emissions from a CMPU subject to this subpart are less than 400 lb/yr, then you must keep records of either the number of batches operated per month (batch vents) or the process operating hours (continuous vents). Also, you must reevaluate your total emissions before you make any process or operational change that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, then you must be in compliance with one of the options for metal HAP process vents in Table 4 of Subpart VVVVV upon initiating operation under the new operating conditions. You must keep records of all recalculated emissions determinations. (40 CFR 63.11495(f)(2))
- v. For an existing source subject to the HAP metals emission limits specified in Table 4 of Subpart VVVVV, the owner or operator must prepare a monitoring plan containing the information in the following paragraphs. The plan must be maintained on-site and be available on request. You must operate and maintain the control device according to a site-specific monitoring plan at all times. You must keep records of monitoring results to demonstrate continuous compliance. (40 CFR 63.11495(f)(3)(i))
 - 1) A description of the device;
 - 2) Results of a performance test or engineering assessment conducted in accordance with § 63.11495(f)(3)(ii) verifying the performance of the device for reducing HAP metals or particulate matter (PM) to the levels required by this subpart;
 - 3) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the

- manufacturer's instructions for routine and long-term maintenance) and continuous monitoring system (CMS).
- 4) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limits; and
- 5) Operating parameter limits based on either monitoring data collected during the performance test or established in the engineering assessment.
- vi. *Recordkeeping*. The owner or operator must maintain files of all information required by this subpart for at least 5 years following the date of each occurrence according to the requirements in §63.10(b)(1). If you are subject, you must comply with the recordkeeping and reporting requirements of §63.10(b)(2)(iii) and (vi) through (xiv), and the following applicable requirements for each CMPU subject to this Subpart VVVVVV. (40 CFR 63.11501(c)(1))
 - Records of management practice inspections, repairs, and reasons for any delay of repair, as specified in §63.11495(a)(5). (§63.11501(c)(1)(i))
 - 2) Records of small heat exchange system inspections, demonstrations of indications of leaks that do not constitute leaks, repairs, and reasons for any delay in repair as specified in §63.11495(b). (§63.11501(c)(1)(ii))
 - Records of metal HAP emission calculations as specified in §63.11496(f)(1) and (2). If total uncontrolled metal HAP process vent emissions from a CMPU subject to this subpart are estimated to be less than 400 lb/yr, also keep records of either the number of batches per month or operating hours, as specified in §63.11496(f)(2). (§63.11501(c)(1)(v))
 - 4) Records of the date, time, and duration of each malfunction of operation of process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this subpart that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. (§63.11501(c)(1)(vii))
 - Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11495(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (§63.11501(c)(1)(viii))

f. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally-acceptable emissions if a new TAC is

introduced or the content of a TAC in a raw material increases and emissions exceed de minimis levels as a result of this change.

S3. **Reporting** (Regulation 2.16, Section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$, NO_X and VOC

The owner or operator shall report the *plant-wide* consecutive 12-month emissions of all air pollutants for each month in the reporting period.

b. **Opacity**

- i. The date and time of each VE Survey where visible emissions were observed and the results of the Method 9 test performed;
- ii. Identification of all periods of exceeding the opacity standard;
- iii. Description of any corrective action taken for each exceedance of an opacity standard specified in this permit; and
- iv. Any deviation from the requirement to perform or record the results of the required monthly VE surveys or Method 9 tests.

c. HAP

- i. The owner or operator shall report the consecutive 12-month *plant-wide* emissions of each individual HAP for each month in the reporting period.
- ii. The owner or operator shall report the consecutive 12-month *plant-wide* emissions of total HAP for each month in the reporting period.
- iii. Semiannual Compliance Reports. The owner or operator must submit semiannual compliance reports that contain the information specified in the following paragraphs, as applicable. Reports are required only for semiannual periods during which you experienced any of the events described in § 63.11501(d)(1) through (8). (40 CFR 63.11501(d))
 - 1) Deviations. You must clearly identify any deviation from the requirements of this subpart. (§63.11501(d)(1))
 - 2) Delay of leak repair. You must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired. (§63.11501(d)(3))
 - 3) Process change. You must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in §63.11501(b). (§63.11501(d)(4))

4) Overlapping rule requirements. Report any changes in the overlapping provisions with which you comply. (§63.11501(d)(6))

5) Malfunctions. If a malfunction occurred during the reporting period, the report must include the number of instances of malfunctions that caused emissions in excess of a standard. For each malfunction that caused emissions in excess of a standard, the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. The report must also include a description of actions you took during a malfunction of an affected source to minimize emissions in accordance with §63.11495(d), including actions taken to correct a malfunction. (§63.11501(d)(8))

d. TAC

- i. Within 6 months of a change of a raw material as described in <u>S2.f.ii</u>, the owner or operator shall submit the re-evaluated EA demonstration to the District.
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall reanalyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulations 5.00 and 5.21, sections 4.22 4.24)

S4. **Testing** (Regulation 2.16, Section 4.1.9)

a. PM

- i. Once during the permit term, the owner or operator shall perform the following testing: (See Comment 3.)
 - 1) An EPA Reference Method 5 performance test within +/- 10% of maximum production on the outlet and inlet of each representative baghouse and cyclone at Clariant Corp. Louisville West Plant; and
 - 2) A capture efficiency test using EPA guidelines.
- ii. The owner or operator shall submit a written compliance test plan that includes the EPA test methods that will be used for compliance testing, the process operating parameters that will be monitored during the compliance test, and the control device performance indicators (e.g. pressure drop) that will be monitored during the compliance test. The compliance test plan shall be furnished to the District at least 30 days prior to the actual date of the compliance test.

iii. The owner or operator shall provide the District at least 10 days prior notice of any compliance test to afford the District the opportunity to have an observer present.

- iv. The owner or operator shall furnish the District with a written report of the results of the compliance test within 60 days following the actual date of the compliance test.
- v. The owner or operator shall submit a timetable for completion of this test within 90 days after issuance of this permit.

b. **HAP**

For an existing source subject to the HAP metals emission limits specified in Table 4 of Subpart VVVVV, you must comply with the initial compliance and monitoring requirements in §63.11496(f)(3)(i) through (iii). You must keep records of monitoring results to demonstrate continuous compliance. (40 CFR 63.11496(f)(3))

- i. You must prepare a monitoring plan containing the information in §63.11496(f)(3)(i)(A) through (E). The plan must be maintained on-site and be available on request. You must operate and maintain the control device according to a site-specific monitoring plan at all times. (40 CFR 63.11496(f)(3)(i))
 - 1) A description of the device;
 - 2) Results of a performance test or engineering assessment conducted in accordance with <u>S4.b.ii.</u> verifying the performance of the device for reducing HAP metals or particulate matter (PM) to the levels required by this subpart;
 - 3) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the manufacturer's instructions for routine and long-term maintenance) and continuous monitoring system (CMS).
 - 4) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limits; and
 - 5) Operating parameter limits based on either monitoring data collected during the performance test or established in the engineering assessment.
- ii. You must conduct a performance test or an engineering assessment for each CMPU subject to a HAP metals emissions limit in Table 4 to this subpart and report the results in your Notification of Compliance Status (NOCS). Each performance test or engineering assessment must be conducted under representative operating conditions, and sampling for each performance test must be conducted at both the inlet and outlet of the control device. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. If you own or operate an existing affected source, you are not required to conduct a performance test if a prior performance test was conducted within the 5 years prior to the effective date using the same methods specified in S4.b.iii., and, either no process changes have been made since the test, or, if

you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. (40 CFR 63.11496(f)(3)(ii))

iii. If you elect to conduct a performance test, it must be conducted according to requirements in §63.11410(j)(1). As an alternative to conducting a performance test using Method 5 or 5D to determine the concentration of PM, you may use Method 29 in 40 CFR 60, appendix A-8 to determine the concentration of HAP metals. You have demonstrated initial compliance if the overall reduction of either HAP metals or total PM is equal to or greater than 95 percent. (40 CFR 63.11496(f)(3)(iii))

Source-Wide Comments

1. Clariant Corp. – Louisville West Plant emits the following TACs subject to the STAR program (Regulations 5.00, 5.01, 5.20, 5.21, 5.22 and 5.23): Ammonia (NH₃), Cobalt & cobalt compounds (Co), Chromium trivalent & chromium compounds (Cr(III)), Chromium & chromium compounds (Cr(VI)), Copper & copper compounds (Cu), Hydrochloric acid (hydrogen chloride (HCl)), Manganese & manganese compounds (Mn), Nickel & nickel compounds (Ni), Nitric acid (HNO₃), and Sulfuric acid (H₂SO₄). The emissions from many emission units are de minimis with control devices, resulting in the requirement to operate the control devices to maintain the de minimis status of those emission units.

Clariant determined the environmental acceptability for TAC emissions that were not de minimis: Co, Cr(VI), Cu, Mn, Ni, and HNO₃. The source-wide $R_{\rm C}$ of 0.88 for new and modified processes and process equipment is less than the EAG_c of 3.8 for all TACs from new and modified processes and process equipment. The source-wide $R_{\rm C}$ of 1.59 for new and modified processes and process equipment on industrial property is less than the EAG_c of 38.0 for all TACs from new and modified processes and process equipment. The source-wide $R_{\rm C}$ of 3.87 for all processes and process equipment is less than the EAG_c of 7.5 for all TACs from all processes and process equipment. The source-wide $R_{\rm C}$ of 5.50 for all TACs from all processes and process equipment is less than the EAG_c of 75.0 for all TACs from all processes and process equipment.

The individual hazard quotient (HQ) for copper from Stack S-201-W17-001 (EP DD-201-W11-110) of 1.8055 is greater than the EAC_{NC} of 1.0. The source-wide HQ for copper of 4.75 is greater than the EAC_{NC} of 1.0 for each individual TAC from all processes and process equipment. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for copper by September 22, 2014, 36 months after notification by the District that the BAC for Copper became more stringent. Clariant submitted a compliance plan on April 8, 2013.

The risks for cobalt from EU 201-W11 and EU 201-W12 are greater than the EA goals. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 by removing cobalt-containing products from EU 201-W11 and EU 201-W12, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.

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The risks for cobalt from EP EP MX-204-W35-001, FR-204-W36-001, T-204-W36-001, CV-204-W37-001-004, PD-204-W37-001, HT-204-W37-001, H-204-W42-001, and PD-204-W42-001 are greater than the EA goals. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 for these emission units, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.

			Risk (EAG _C)		$HQ(EAG_{NC})$	
EU	Stack ID	TAC	Unadjusted	Industrial	Unadjuste	Industrial
EU	Stack ID	IAC	Process	Process	d Process	Process
			$EAG_C \leq 1.0$	$EAG_C \leq 10.0$	$EAG_{NC} \leq 1.0$	$EAG_{NC} \leq 3.0$
	S-201-W07-003					
	(T-201-W07-505)					
201-	S-201-W07-005					
W07	(T-201-W07-501)	HNO_3			0.49	2.48
	S-201-W07-001	111103			0.15	2.10
	(T-201-W07-500)					
250-	S-250-W55-001					
W55	(T-250-W55-102)			0.000	0.00=	0.4-1
201-	S-201-W08-002	Ni	.094	0.098	0.007	0.374
W09	(HT-W09-001)	Cr(VI)	0.068	0.071	0.035	0.037
	S-201-W10-003					
201	(HT-201-W10-420	Ni			0.015	
201-	& H-201-W10-		0.20			
W10	440 & 442)		0.20			
	S-201-W10-007	Cu			0.202	
	(201-W10) S-201-W17-001	Cu			1.8055	
	(DD-W11-110)	Mn			0.66	
201-	S-201-W11-001	Cu			0.7511	
W11	(SD-W11-130)	Mn			0.7311	
** 11	S-201-W11-001	IVIII			0.27	
	(SD-W11-130A)	Co			0.26	
	S-201-W12-002	~			0.0402	
	(SD-W12-230b)	Cu			0.0102	
201	S-201-W12-002	Cu			0.769	
201-	(SD-W12-230a)	Ni	0.04		0.0037	
W12	S-201-W12-001	Co			0.48	
	(DD-W12-210/T-	Cu			0.2576	
	W12-210)	Ni	0.57		0.044	
204-	S-204-W42-001	Cu			0.767	
W42	(HT-W42-001)	Ni	1.0	1.376	0.077	0.10
212-	All, but may be	Cu			0.961	
W45	wrong	Ni	0.44	1.69	0.033	0.13
	S-220-W53-003					
	(DD-220-W53-					
220-	006, H-220-W53-					
W53	011, FD-220-	Ni	0.46	0.46	0.035	0.035
*****	W53-005, -007					
	and -019, BE-220-					
	W53-001, FD-					

			Risk (E	EAG_C	HQ (E	CAG_{NC}
EU	Stack ID	TAC	Unadjusted Process $EAG_C \le 1.0$	Industrial Process $EAG_C \le 10.0$	Unadjuste d Process EAG _{NC} ≤1.0	Industrial Process EAG _{NC} ≤3.0
	220-W53-020, SL-220-W53-012 and -013, H-W53- 012, -013 and - 016, V-W53-002 and -003, CV-220- W53-003 and - 005)			<u> </u>		
	S-250-W55-031 (DD-250-W55- 101/T-250-W55- 105)	Cr(VI)	0.11	0.20	0.0012	0.0021
250- W55	S-250-W55-027 (HT-250-W55-801 & HT-250-W55- 801B as 801 carrier ht tr.)	Cr(VI)	0.88	1.59	0.0091	0.0165
Plant-wide R _C : for new processes ¹ , ² :			0.88 (≤3.8)	1.59 (≤38.0)		
Plant-wide R _C : for all processes ^{1, 2} :			3.87 (≤7.5)	5.50 (≤75.0)		

Plant-wide R_C for unadjusted new and modified ≤ 3.8 and unadjusted total ≤ 7.5 ; Plant-wide R_C for industrial new and modified ≤ 38.0 and industrial total ≤ 75.0 .

The R_C does not include cobalt. Clariant will comply with the EA goals for cobalt by December 4, 2016.

Source-wide HQ					
	\mathbf{HQ} (EAG_{NC})	\mathbf{HQ} (EAG_{NC})			
TAC	(Unadjusted)	(Industrial)			
	$EAG_{NC} \leq 1.0$	$EAG_{NC} \leq 3.0$			
Cr(VI)	0.046	0.056			
Cu	4.75				
Mn	0.93				
Ni	0.215	0.643			
HNO3	0.49	2.48			

- 2. For STAR demonstration purposes, only the base metal form of the HAP needs to be recorded and reported.
- 3. As of the issuance of this Title V operating permit, the source utilizes the following dust collector control efficiencies.

Control Efficiency	Representative Control Device	Stack Test Date
95%	Efficiency per FEDOOP 0073-97-F	NA
99.055%	Stack test of NOMEX type bags (Plant #36 DC-201-W13-350)	10-04

Control Efficiency	Representative Control Device	Stack Test Date
99.343%	Stack test of polyester type bags (Plant #36 DC-203-W21-001)	10-04
99.786%	Stack test of Torit type (ultra web) cartridges (Plant #36 DC-204-W32-001)	11-05
99.9993	Stack test of Mott tubes (Plant #42 DC-101-S16-117)	10-04

EU 201-W02: Sodium aluminate and sodium carbonate tanks

201-W02 Applicable Regulations

Federally Enforceable Regulations					
Regulation	Title	Applicable Sections			
<u>6.09</u>	Standards of Performance for Existing Process Operations	1 through 3			
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			

	District Only Enforceable Regulations					
Regulation	Title	Applicable Sections				
NA	NA	NA				

201-W02 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations		Stack ID
T-201-W02-002	Sodium Aluminate Premix tank, 1000 gal	2004	7.08	Fugitive	NA
T-201-W02-003	Sodium Carbonate Tank, 7000 gal	1961	6.09	Fugitive	NA

There are no control devices associated with EU 201-W02.

201-W02 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause PM emissions to exceed 2.34 lb/hr from EP T-201-W02-002. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. The owner or operator shall not allow or cause the PM emissions to exceed 2.91 lb/hr from EP T-201-W02-003. (Regulation 6.09, section 3.1.2) (See Comment 2.)
- iii. The owner or operator shall not allow the processing rate from EP T-201-W02-003 to exceed 1164 lb/batch. (See Comment 2.)
- iv. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b.

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. See Source-Wide Conditions S2.
- ii. The owner or operator shall monitor and record the operating hours per month from EP T-201-W02-003.

b. **Opacity**

See Source-Wide Conditions S2.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. See Source-Wide Conditions S3.a.
- ii. For any period of exceeding the emission standard in S1.a.ii., the owner or operator shall report the following information:
 - 1) The quantity of excess emissions; and
 - 2) Corrective action taken to minimize the extent of the exceedance, and measures implemented to prevent reoccurrence

b. **Opacity**

See Source-Wide Conditions S3.b

201-W02 Comments

1. The potential uncontrolled hourly PM emissions are below the applicable emission standard in Regulation 7.08.

2. The processing rate limit will maintain the hourly PM emissions below the applicable emission standard in Regulation 6.09.

EU 201-W03 and 201-W10: Powder calcining, weighing, mixing, compacting, grinding, tabletting and tablet calcining

201-W03: Copper Zinc Tabletting

201-W10: C8 Calcining and Forming System

201-W03 and 201-W10 Applicable Regulations

Federally Enforceable Regulations					
Regulation Title Applicable Sections					
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide			
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions			

District Only Enforceable Regulations					
Regulation	Title	Applicable Sections			
<u>5.00</u>	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

201-W03 and 201-W10 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
201-	FR-201-W03-450	Filter Receiver	2005		FIL-201-W03-450	S-201-
W03		(99.489%)		7.00 5.01	FIL-201-W03-455	W10-003
	H-201-W03-455	Hand Addition Hopper	2005	7.08, 5.21, 40 CFR 63 VVVVVV	BV-201-W03-455	S-201- W10-003
	MX-201-W03-460	Mixer/Blender	2005	~ ~ ~ ~ ~ ~ ~ ~ ~	BV-201-W03-460	S-201-
					DC-201-W03-500	W10-003
	H-201-W03-462	Hopper	2005			
	H-201-W03-465	Compact Hopper	2005			
	COM-201-W03-465/	Compactor	2005			
	M-201-W03-465/ M-	System				
	201-W03-466	(Compactor and 2				
		Compactor Mills)				
	H-201-W03-470	Hopper	2005	7.00 5.21		
	TM-201-W03-470	Tabletting Machine	2005	7.08, 5.21, 40 CFR 63 VVVVVV	DC-201-W03-500	S-201- W10-003
	DU-201-W03- 475/476	2 Dedusters	2005	~~~~		
	CV-201-W03-480	Conveyor/Hopper	2005			
	H-201-W03-471/	Conveyor/Hopper	2005			
	CV-201-W03-476					
	H-201-W03-476/ PA-	Tablet	2005			
	201-W03-490	Hopper/Packager				

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
	FR-201-W03-467	Filter Receiver (99.489%)	2005	7.08, 5.21, 40 CFR 63 VVVVVV	FIL-201-W03-467 FIL-201-W03-468	S-201- W10-006
201- W10	FR-201-W10-400	Filter Receiver (99.489%)	2005	7.08, 5.21 40 CFR 63	FIL-201-W10-400 FIL-201-W10-405	S-201- W10-001
	DD-201-W10-410/H- 201-W10-410	Drum Dumper/ Powder Hopper	2005	VVVVVV	BV-201-W10-410 DC-201-W10-445	S-201- W10-003
	HT-201-W10-420	Rotary Calciner #4	2005	7.08, 5.21 40 CFR 63 VVVVVV	DC-201-W10-445	S-201- W10-003
		Rotary Calciner #4, heating zone, 2.5 MMBTU/hr		NA	NA	S-201- W10-002
	H-201-W10-440/442	2 Hoppers	2005	7.08, 5.21	DC-201-W10-445	S-201-
	PA-201-W10-420	Drumming/ Packaging Station	2005	40 CFR 63 VVVVVV	NA	W10-003

201-W03 and 201-W10 Control Devices

EU	Control ID	Description	Stack ID
201-	DC-201-W03-500	Donaldson (99.786%), Model Torit Downflo II 3-24	S-201-W10-003
W03	FIL-201-W03-450	Cartridge Filter (95%), Solberg, Model 275P	S-201-W10-003
	FIL-201-W03-455	HEPA Filter (99%), Solberg	S-201-W10-003
	BV-201-W03-455	Bin Vent Filter (99.489%), Mac Equipment, Model 2MTF2, Mactiflo	S-201-W10-003
	BV-201-W03-460	Bin Vent Filter (99.489%), Mac Equipment, Model 19RTC3	S-201-W10-003
	FIL-201-W03-467	Cartridge Filter (95%), Solberg, Model 275P	S-201-W10-003
	FIL-201-W03-468	HEPA Filter (99%), Solberg	S-201-W10-003
201-	FIL-201-W10-400	Cartridge Filter (95%), Mac Equipment	S-201-W10-001
W10	FIL-201-W10-405	HEPA Filter (99.97%), Mac Equipment	S-201-W10-001
	BV-201-W10-410	Bin Vent Filter (99.489%), Mac Equipment, Model 19RTC3	S-201-W10-003
	DC-201-W10-445	Fabric Filter (99.489%), Mac Equipment, Model 4M2F16	S-201-W10-003

201-W03 and 201-W10 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EU	EP	Emission Limit (lb/hr)
201-	FR-201-W03-450	4.12
W03	H-201-W03-455, MX-201-W03-460, H-201-W03-462, H-201-W03-465, COM-201-W03-465, M-201-W03-465, M-201-W03-466, H-201-W03-470, TM-201-W03-470, DU-201-W03-475, DU-201-W03-476, FR-201-W03-467, CV-201-W03-480, H-201-W03-471/ CV-201-W03-476, H-201-W03-476/ PA-201-W03-490	2.34 each
	FR-201-W03-467	3.0
201-	FR-201-W10-400, DD-201-W10-410, H-201-W10-410	3.0 each
W10	HT-201-W10-420, H-201-W10-440 & 442	2.34 each

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 4.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this equipment.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of FIL-201-W10-400, FIL-201-W10-405, FIL-201-W10-455, BV-201-W10-455, BV-201-W10-455, BV-201-W10-460, FIL-201-W10-467, FIL-201-W10-468, DC-201-W10-445 and DC-201-W10-500 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

EU	Control ID	Pressure Drop (" w.c.)
201-W03	DC-201-W03-500	1.0 - 7.0
	BV-201-W03-455, BV-201-W03-460	1.0 - 5.0
	FIL-201-W03-450, FIL-201-W03-455, FIL-201-W03-467, FIL-201-W03-468	1.0 – 6.5
201-W10	FIL-201-W10-400, FIL-201-W10-405	1.0 – 6.5
	BV-201-W10-410	0.5 - 10.0
	DC-201-W10-445	1.0 - 7.0

- iii. For any period of operating outside the established pressure drop range for FIL-201-W10-400, FIL-201-W10-405, FIL-201-W10-450, FIL-201-W10-455, BV-201-W10-455, BV-201-W10-410, BV-201-W10-460, FIL-201-W10-467, FIL-201-W10-468, DC-201-W10-445 and/or DC-201-W10-500, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop ranges for FIL-201-W03-450, FIL-201-W03-455, BV-201-W03-455, BV-201-W03-460, FIL-201-W03-467, FIL-201-W03-468, FIL-201-W10-400, FIL-201-W10-405, BV-201-W10-410, DC-201-W10-445 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 14.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

201-W03 and 201-W10 Comments

- 1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. Except where a tier 2 or 3 analysis is noted, the potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	EP	Cu	Mn	Ni
	FR-201-W03-450, MX-201-W03-460	2 nd	2^{nd}	2^{nd}
	H-201-W03-455		1^{st}	
	H-201-W03-462, H-201-W03-465, H-201-W03-470, DU-201-			
201-	W03-475/476, CV-W03-480, H-W03-471/ CV-201-W03-476,	1^{st}	1^{st}	1^{st}
W03	H-W03-476/ PA-W03-490			
	COM-201-W03-465, M-201-W03-465, M-201-W03-466, TM-	2 nd	1 st	1 st
	201-W03-470	2	1	1
	FR-201-W03-467	2^{nd}	2^{nd}	2^{nd}
201-	FR-201-W10-400, DD-201-W10-410/H-201-W10-410	2 nd	2^{nd}	2^{nd}
W10	HT-201-W10-420 and H-201-W10-440 & 442	Tier 3	1^{st}	Tier 2

[&]quot;--" This emission point has no emissions of the specified TAC.

From EP HT-201-W10-420 and H-201-W10-440 & 442, the potential controlled TAC emissions of nickel are above the averaging period de minimis levels. Therefore, the source performed a tier 2 analysis, resulting in the following hazard quotients.

EU	EP	TAC	Location	Risk	Status	HQ	Status
201-	HT-201-W10-420 and	Cu	unadjusted			0.202	≤ 1.0
W10	H-201-W10-440 & 442	Ni	unadjusted	0.20	≤ 1.0	0.02	≤ 1.0

EU 201-W04 and 201-W09: Material Transfer and #3 Rotary Calciner

EU 201-W04: Material Transfer; Transfer of raw materials and final product EU 201-W09: #3 Rotary Calciner; Heat treatment of spray dried metal oxides

201-W04 and 201-W09 Applicable Regulations

Federally Enforceable Regulations					
Regulation Title Applicable Sections					
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide			
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions			

	District Only Enforceable Regulations					
Regulation	Title	Applicable Sections				
<u>5.00</u>	Definitions	1 through 2				
<u>5.01</u>	General Provisions	1 through 4				
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3				
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5				
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6				

201-W04 and 201-W09 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control ID	Stack ID
201- W04	FR-201-W04- 001	Filter Receiver (99.343%)	2008	7.08, 5.21,	DC-201-W04-001 CYC-201-W09-001 DC-201-W09-001	S-201- W09- 002
	PD-201-W04- 001	Product Drum	2008	40 CFR 63 VVVVVV	FR-201-W04-001 DC-201-W04-001 CYC-201-W09-001 DC-201-W09-001	S-201- W09- 002
201- W09	DD-201-W09- 001/ H-201- W09-001	Drum Dumper/ Feed Hopper	1966	6.09, 5.21, 40 CFR 63 VVVVVV	DC-201-W04-001 CYC-201-W09-001 DC-201-W09-001	S-201- W09- 002
	HT-201-W09- 001	Rotary Calciner #3, inlet		7.08, 5.21, 40 CFR 63 VVVVVV	CYC-201-W09-001 DC-201-W09-001	S-201- W08- 002
		Rotary Calciner #3 heating zone, 2 MMBTU/hr	1990	NA	NA	S-201- W08- 001

201-W04 and 201-W09 Control Devices

Control ID	Description	Stack ID
FR-201-W04-001	Filter Receiver (99.343%), Vac-U-Max	S-201-W04-001
DC-201-W04-001	Baghouse (99.786%), Torit Model 2D454	S-201-W09-002
CYC-201-W09-001	Cyclone (95%), Donaldson Torit Model 20-5 CYC AW	S-201-W09-002
DC-201-W09-001	Baghouse (99.055%), Mikropul Model 25-8	S-201-W09-002

201-W04 and 201-W09 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not cause or allow PM emissions to exceed 2.34 lb/hr from EP FR-201-W04-001 and PD-201-W04-001. (Regulations 6.09, section 3.1.2, and 7.08, section 3.1.2) (See Comment 1.)

EU	EP	Emission Limit (lb/hr)	Applicable Regulation
201- W04	FR-201-W04-001 and PD-201-W04- 001	2.34	7.08
201-	DD-201-W09-001	9.94	6.09
W09	H-201-W09-001	2.58	6.09
	HT-201-W09-001	2.34	7.08

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 4.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime:

- 2) The process throughput during the control device downtime;
- 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-201-W04-001, CYC-201-W09-001 and DC-201-W09-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

EU	Control ID	Pressure Drop (" w.c.)
201-W04	DC-201-W04-001	2.0 - 8.0
201-W09	DC-201-W09-001	0.5 - 10.0

- iii. For any period of operating outside the established pressure drop range for DC-201-W04-001 and/or DC-201-W09-001, the owner or operator shall maintain the following records:
 - 1) The date,

- 2) The observed pressure drop,
- 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

iv. Upon notification to the District, the owner or operator may modify the pressure drop ranges for DC-201-W04-001 and DC-201-W09-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during a reporting period, the compliance report must include a statement to that effect.

201-W04 and 201-W09 Comments

1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulations 6.09 and 7.08 after the first control device.

2. The District has determined that no periodic visible emissions surveys are required for this emission unit.

3. Except where a tier 3 analysis is noted, the potential TAC emissions for the following emission points are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	Emission Point	Cr(VI)	Cu	Ni
201-	FR-201-W04-001		1	2^{nd}
W04	PD-201-W04-001			1 st
201	DD-201-W09-001	2 nd	2^{nd}	2^{nd}
201- W09	H-201-W09-001	2 nd	1 st	2^{nd}
W 09	HT-201-W09-001	Tier 3	1^{st}	Tier 3

[&]quot;--" This emission point has no emissions of the specified TAC.

Because the potential controlled emissions of hexavalent chromium and nickel from EP HT-201-W09-001 are above the de minimis levels, the source determined the maximum ambient concentrations in order to calculate the following risks and hazard quotients.

EU	Emission Point	TAC	Location	Risk	Status	HQ	Status
201-	S-201-W09-002	Ni	unadjusted	0.13	≤ 1.0	0.01	≤ 1.0
W09	(HT-201-W09-	Cr(VI)	unadjusted	0.071	≤ 1.0	0.037	≤ 1.0
VV 09	001)	CI(VI)	non-industrial	0.068	≤ 10.0	0.035	≤ 3.0

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EU 201-W05: First Chemical Manufacturing; Mixing and forming of metal oxide catalysts

201-W05 Applicable Regulations

Federally Enforceable Regulations					
Regulation Title Applicable Section					
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5			
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide			
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions			

District Only Enforceable Regulations			
Regulation Title Applicable Sections			
<u>5.00</u>	Definitions	1 through 2	
<u>5.01</u>	General Provisions	1 through 4	
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3	
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5	
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6	

201-W05 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
H-201-W05-111	Bag Dump Station	1998	7.08	BV-201- W05-111	S-201-W05- 004
FR-201-W05-115	Filter Receiver (99.343%), Premier Pneumatics	1998	7.08	FIL-201- W05-115	S-201-W05- 002
FR-201-W05-102	Filter Receiver (99.343%), Vac-U-Max	1998	7.08	FIL-201- W05-102	S-201-W05- 003
T-201-W05-102	Precipitator Tank, 12,000 gal	1998	7.08	ED-201- W05-108	S-201-W05- 001
HT-201-W05-101	Box Dryer, 2 MMBtu/hr	1998	7.25	NA	S-201-W05- 009
DD-201-W05-101	Rack Dumper	1998			
M-201-W05-101	Lump Breaker	1998	7.08, 5.21,	DC-201-	
M-201-W05-102	Hammermill	1998	40 CFR 63	W05-101	S-201-W05-
VS-201-W05-101	Sweco Screener	1998	VVVVVV	FIL-201-	008
MX-201-W05-101	Eirich Mixer	1998		W05-112	000
DD-201-W05-102	Rack Dumper	1998		,, 05 112	
H-201-W05-101	Powder Storage Hopper	1998	7.08, 5.21		
FR-201-W05-103	Filter Receiver (99.343%), Vac-U-Max	1998	7.08	FIL-201- W05-103	S-201-W05- 006
FR-201-W05-104	Filter Receiver (99.343%), Vac-U-Max	1998	7.08, 5.21, 40 CFR 63 VVVVVV	FIL-201- W05-104	S-201-W05- 007

201-W05 Control Devices

Control ID	Description	Stack ID
BV-201-W05-111	Bin Vent filter (99.343%), Vac-U-Max, Model 40283	S-201-W05-004
FIL-201-W05-115	Cartridge Filter (95%), Premier Pneumatics, Model 5215-12?	S-201-W05-002
FIL-201-W05-102	Cartridge Filter (95%), Vac-U-Max	S-201-W05-003
FIL-201-W05-103	FIL-201-W05-103 HEPA Filter (99.97%), Vac-U-Max	
FIL-201-W05-104	HEPA Filter (99.97%), Vac-U-Max	S-201-W05-007
ED-201-W05-108	Eductor/Venturi Scrubber (95%), Schutte & Koerting, Model 7010	S-201-W05-001
DC-201-W05-101	C-201-W05-101 Baghouse (99.786%), Donaldson, Model Torit Downflo 3DF-12	
FIL-201-W05-112	HEPA Filter (99.97%), Donaldson Torit Ultra Lok 1x2	S-201-W05-008

201-W05 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
H-201-W05-111 and FR-201-W05-115	3.13 each
FR-201-W05-102, MX-201-W05-101, and FR-201-W05-104	4.62 each
DD-201-W05-101, M-201-W05-101, M-201-W05-102, VS-201-W05-101, FR-201-W05-103, H-201-W05-101 and DD-201-W05-102	5.52 each
T-W05-102	6.02

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See <u>Source-Wide Conditions S1.b.</u> (See Comment 2.)

c. VOC

- i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3)
- ii. See Source-Wide Conditions S1.a.

d. HAP

See Source-Wide Conditions S1.c.

e. TAC

See Source-Wide Conditions S1.d. (See Comment 3.)

f. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2 and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. VOC

See Source-Wide Conditions S2.a.

d. HAP

See Source-Wide Conditions S2.e.

e. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of BV-201-W05-111, FIL-201-W05-115, FIL-201-W05-102, FIL-201-W05-103, FIL-201-W05-104, ED-201-W05-108, DC-201-W05-101, FIL-201-W05-101, FR-201-W05-102, FR-201-W05-103, FR-201-W05-104, and FR-201-W05-115 for signs of damage, air leakage, corrosion, or other equipment defects, and repair

and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
BV-201-W05-111	1.0 - 4.0
FIL-201-W05-115, FIL-201-W05-102, FIL-201-W05-103, FIL-201-W05-104	1.0 – 6.0
DC-201-W05-101	0.5 - 10.0
FIL-201-W05-112	0.2 - 5.0

iii. For ED-201-W05-108, the owner or operator shall monitor and record the water flowrate at least once during each operating day to ensure it is maintained within the operating ranges as shown in the table below.

Control ID	Inlet Flowrate (gpm)	Makeup Rate (gpm)
ED-201-W05-108	≥ 50 gpm	5 – 15 gpm

- iv. For any period of operating outside the established performance indicator range for BV-201-W05-111, FIL-201-W05-115, FIL-201-W05-102, FIL-201-W05-103, FIL-201-W05-104, DC-201-W05-101, FIL-201-W05-112, and/or ED-201-W05-108, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for BV-201-W05-111, FIL-201-W05-115, FIL-201-W05-102, FIL-201-W05-103, FIL-201-W05-104, DC-201-W05-101 and ED-201-W05-108 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.
- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. VOC

See Source-Wide Conditions S3.a.

d. HAP

See Source-Wide Conditions S3.c.

- e. TAC
 - i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
 - ii. See Source-Wide Conditions S3.d.

f. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iv. If there were no excursions during a reporting period, compliance report must include a statement to that effect.

201-W05 Comments

- 1. The potential controlled PM emissions from EP DD-201-W05-101, M-201-W05-101, M-201-W05-102, VS-201-W05-101, H-201-W05-101, MX-201-W05-101 and DD-201-W05-102 meet the applicable emission standard in Regulation 7.08 after the first control device. The potential controlled PM emissions from EP H-201-W05-111, FR-201-W05-115, FR-201-W05-102, T-201-W05-102, FR-201-W05-103 and FR-201-W05-104 meet the applicable emission standard in Regulation 7.08 after the second control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	EP	Cu	Ni
	DD-201-W05-101, M-201-W05-101, M-201-W05-102, VS-201-W05-101,	2 nd	2 nd
201	MX-201-W05-101, DD-201-W05-102		2
201- W05	FR-201-W05-103	1 st	
W 03	H-201-W05-101	2 nd	
	FR-201-W05-104	1 st	1 st

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 201-W06: Wet process system for product reaction and purification for drying and calcination

201-W06 Applicable Regulations

Federally Enforceable Regulations				
Regulation	egulation Title Applicable Sections			
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3		

District Only Enforceable Regulations				
Regulation Title Applicable Sections				
5.00	Definitions	1 through 2		
<u>5.01</u>	General Provisions	1 through 4		
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5		
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6		

201-W06 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
SSU-201-W06- 005/ H-201-W06- 005	Supersack Unloader/ Supersack Unloading Hopper	2005	7.08	BV-201- W06-005	S-201-W06- 001
FR-201-W06-008	Filter Receiver (99.489%)	2005	7.08	FIL-201- W06-008 FIL-201- W06-009	S-201-W06- 002
T-201-W06-010	Sodium Aluminate Tank	2005	7.08	NA	Fugitive
T-201-W06-022	Metering Tank, 150 gal	2005	5.21	NA	Fugitive
T-201-W06-025	Sodium Aluminate Tank, 660 gal	2005	7.08, 5.21	ED-201- W06-029	S-201-W06- 003

201-W06 Control Devices

Control ID	ontrol ID Description	
BV-201-W06-005	Bin Vent Filter (99.489%), Mac Equipment, Model 39RTC3, 2006	S-201-W06-001
ED-201-W06-029	Eductor/Venturi Scrubber (75%), Bionomic Inc., Model 6500 4/6	S-201-W06-003
FIL-201-W06-008	Cartridge Filter (95%), Solberg, Model 275P, 2006	S-201-W06-002
FIL-201-W06-009	HEPA Filter (99%), Solberg, 2006	S-201-W06-002

201-W06 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause the PM emissions to exceed 13.03 lb/hr from EP SSU-201-W06-005, H-201-W06-005 and FR-201-W06-008. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. The owner or operator shall not allow or cause the PM emissions to exceed 2.34 lb/hr from EP T-201-W06-010 and T-201-W06-025. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- iii. See Source-Wide Conditions S1.a.

b. **Opacity**

See <u>Source-Wide Conditions S1.b.</u> (See Comment 2.)

c. TAC

See Source-Wide Conditions S1.d. (See Comment 3.)

d. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, and 7.08 section 3.1.2)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. TAC

i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- 3) The emissions of each TAC (lb/hr and lb/avg. period); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

d. **Control Device Operation**

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of BV-201-W06-005, FIL-201-W06-008, FIL-201-W06-009 and ED-201-W06-029 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
BV-201-W06-005	1.0 - 6.0
FIL-201-W06-008, FIL-201-W06-009	1.0 - 11.0
ED-201-W06-029	1.0 - 5.0

- iii. For ED-201-W06-029, the owner or operator shall monitor and maintain records of the inlet water flow rate at least once during each operating day to ensure it is greater than or equal to 12 gpm.
- iv. For any period of operating outside the established performance indicator range for BV-201-W06-005, FIL-201-W06-008, FIL-201-W06-009 and/or ED-201-W06-029, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for BV-201-W06-005, FIL-201-W06-008, FIL-201-W06-009, and/or ED-201-W06-029 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the

operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information recorded in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.c.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

d. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.d.iv. If there were no excursions during a reporting period, compliance report must include a statement to that effect.

201-W06 Comments

- 1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device, with the exception of EP T-201-W06-025, which can meet the PM standard uncontrolled.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. For EP T-201-W06-022 and T-201-W06-025, the potential uncontrolled TAC emissions of nitric acid are de minimis.

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EU 201-W07 and 201-W14: Reactors

EU 201-W07: Nitrate Reactors; Reacting copper and zinc metal with nitric acid to produce metal nitrate solutions

EU 201-W14: Special Reactor System

201-W07 and 201-W14 Applicable Regulations

Federally Enforceable Regulations						
Regulation Title Applicable Sections						
<u>7.08</u>	1 through 4					
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide				
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions				

District Only Enforceable Regulations						
Regulation	Regulation Title Applicable Sections					
<u>5.00</u>	Definitions	1 through 2				
<u>5.01</u>	General Provisions	1 through 4				
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3				
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5				
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6				

201-W07 and 201-W14 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
201- W07	T-201-W07-500	Nitric Acid Tank, 10,000 gal	1984		NA	S-201-W07-001 and S-201- W07-002
	T-201-W07-501	Nitric Acid Tank, 10,000 gal	1984	5.21	NA	S-201-W07-005
	T-201-W07-505	Nitric Acid Batch Tank, 2100 gal	1997		NA	S-201-W07-003
	T-201-W07-510	Copper Nitrate Reactor	1984	7.08	ED-201-W07-581, ED-201-W07-590, V-201-W07-595	S-201-W07-004
	T-201-W07-520	Copper Nitrate Reactor	1987	7.08	ED-201-W07-585, ED-201-W07-590, V-201-W07-595	S-201-W07-004
	T-201-W07-550	Zinc Nitrate Reactor	1987	7.08	ED-201-W07-583, ED-201-W07-590, V-201-W07-595	S-201-W07-004
201- W14	DD-201-W14- 001	Drum Dumper	2007	7.09 5.21	ED-201-W07-590 V-201-W07-595	S-201-W07-004
	T-201-W14-003	Specialty Reactor	1990	7.08, 5.21, 40 CFR 63 VVVVVV	ED-201-W07-590 V-201-W07-595 ED-201-W07-595	S-201-W07-004 S-201-W14-001 (emergency vent)

201-W07 and 201-W14 Control Devices

Control ID	Description	Stack ID
ED-201-W07-581	Eductor #1 (75%), Schutte & Koerting Model 7014 L	S-201-W07-004
ED-201-W07-583	Eductor #2 (75%), Schutte & Koerting Model 7014 L	S-201-W07-004
ED-201-W07-585	Eductor #3 (75%), Schutte & Koerting Model 7014 L	S-201-W07-004
ED-201-W07-590	Eductor T-002 (75%), Schutte & Koerting Model 7014 L	S-201-W07-004
V-201-W07-595	Two-stage packed column wet scrubber (75% / 2 stages)	S-201-W07-004

201-W07 and 201-W14 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.4.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not cause or allow the PM emissions to exceed 2.34 lb/hr from EP DD-201-W14-001 and T-201-W14-003. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. For EU 201-W14, See Source-Wide Conditions S1.a.

b. **Opacity**

For EU 201-W14, see Source-Wide Conditions S1.b. (See Comment 2.)

c. NO_X

- i. For EP T-201-W07-510, T-201-W07-520 and T-201-W07-550, the owner or operator shall not allow or cause the emissions of NO_X to exceed 300 ppm by volume, expressed as NO_2 . (Regulation 7.08, section 4) (See Comment 3.)
- ii. See Source-Wide Conditions S1.a.

d. HAP

See Source-Wide Conditions S1.c.

e. TAC

See Source-Wide Conditions S1.d. (See Comment 4.)

f. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;

- 2) The process throughput during the control device downtime;
- The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for EU 201-W14.

c. NO_X

- i. For any period of time when the process was operating and a NO_X control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of NO_X (ppmv and tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.d.

d. HAP

See Source-Wide Conditions S2.e.

e. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of ED-201-W07-581, ED-201-W07-583, ED-201-W07-585, ED-201-W07-590, V-201-W07-595 and ED-201-W14-595 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop
ED-201-W07-581, ED-201-W07-583 ED-201-W07-585	> 1" w.c. each
ED-201-W14-595	> 80 psi

iii. The owner or operator shall monitor and record the water flowrate at least once during each operating day to ensure it is maintained within the operating ranges as shown in the table below.

Control ID	Inlet Flowrate (gpm)	Makeup Rate (gpm)
ED-201-W07-581, ED-201-W07-583 ED-201-W07-585	≥ 39 each	5-15 each
ED-201-W07-590	≥ 60	0.5 - 10.0
V-201-W07-595	\geq 200 (Stage 1) \geq 100 (Dilute stage)	0.5 – 10.0

- iv. For any period of operating outside the established performance indicator range for ED-201-W07-581, ED-201-W07-583, ED-201-W07-585, ED-201-W07-590, V-201-W07-595 and/or ED-201-W14-595, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information recorded in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for EU 201-W14.

c. NO_X

i. Identification of all periods of bypassing a NO_X control device while an associated NO_X emission point was in operation during a reporting period, including the information in S2.c.i., or a negative declaration if there were no periods of bypassing a control device during the reporting period.

ii. See Source-Wide Conditions S3.a.

d. HAP

See Source-Wide Conditions S3.c.

e. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

f. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

201-W07 and 201-W14 Comments

- 1. The potential uncontrolled hourly PM emissions from EP DD-201-W14-001 meet the applicable emission standard in Regulation 7.08. The potential controlled hourly PM emissions from EP T-201-W14-003 meet the applicable emission standard in Regulation 7.08 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential controlled NOx emissions are below the 300 ppm NOx emission standard.
- 4. The potential uncontrolled TAC emissions are above the averaging period de minimis levels from EP T-201-W07-505, T-201-W07-501 and T-201-W07-500. Therefore, the source performed a tier 3 analysis, resulting in the following hazard quotients.

EU	EP	TAC	Unadjusted HQ (≤ 1.0)	Non-industrial HQ (≤ 3.0)
201-	T-201-W07-505		0.68	0.29
W07	T-201-W07-501	HNO ₃	0.27	0.18
WU7	T-201-W07-500		0.68	0.29

The potential TAC emissions from EU 201-W14 are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	EP	Mn	HNO ₃
201-	DD-201-W14-001	2^{nd}	
W14	T-201-W14-003	2^{nd}	*

^{*}This emission point can meet the de minimis value without a control device.

4. The operation of the Specialty Reactor System was previously classified as an R&D activity. The reactor will be used for the commercial manufacturing of products T-4503, T-374A, T-2732, T-2541, and T-4424.

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 201-W11, 201-W12 and 201-W17: #1 and #2 Spray Dryers and Slurry Manufacturing

EU 201-W11: #1 Spray Dryer; Spray drying of slurries of metal oxides

EU 201-W12: #2 Spray Dryer; Spray drying of slurries of metal oxides

EU 201-W17: Slurry Manufacturing; mixing, reacting and grinding of powders and metal salts with acids in a water slurry

201-W11, 201-W12 and 201-W17 Applicable Regulations

Federally Enforceable Regulations					
Regulation Title Applicable Sections					
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide			
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions			

District Only Enforceable Regulations						
Regulation	Title	Applicable Sections				
<u>5.00</u>	Definitions	1 through 2				
<u>5.01</u>	General Provisions	1 through 4				
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3				
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5				
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6				

201-W11, 201-W12 and 201-W17 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
201- W11	DD-201-W11- 110	Drum Dumper	1965	7.08, 5.21, 40 CFR 63 VVVVVV	DC-201-W17-001	S-201-W17- 001
	SD-201-W11- 130	#1 Spray Dryer (83.99%), 6 MMBTU/hr		7.08, 5.21,	SEP-201-W11-140 DC-201-W11-150	S-201-W11- 001
	and SD-201-W11- 130A	#1 Spray Dryer (83.99%), 6 MMBtu/hr, product A		40 CFR 63 VVVVVV	SEP-201-W12-260 ED-201-W12-270 SC-201-W12-275	S-201-W12- 004
	SEP-201-W11- 180	Separator/ Elutriator	1988	7.08, 5.21	DC-201-W11-190	S-201-W11- 002
	PD-201-W11- 001	Product Drum	1988	7.08, 5.21	DC-201-W11-150	S-201-W11- 001
201- W12	SD-201-W12- 230a/ SEP-201- W12-240 and SD-201-W12- 230b/ SEP-201- W12-240	#2 Spray Dryer (83.99%)/ Cyclone	1966	7.08, 5.21, 40 CFR 63 VVVVVV	DC-201-W12-250 SEP-201-W12-260 ED-201-W12-270 SC-201-W12-275	S-201-W12- 002
	PD-201-W12- 001 PD-201-W12-	Spray Dryer Product Drum, 55 gal Cyclone Fines	1966	7.08, 5.21, 40 CFR 63 VVVVVV 7.08	DC-201-W12-250	S-201-W12- 001

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
	002	Drum, 55 gal				
	SEP-201-W12- 280	Elutriator	2003			C 201 W12
	PD-201-W12- 003	Elutriator Product Drum, 55 gal	2003	7.08	DC-201-W12-290	S-201-W12- 003
	H-201-W12-295	Baghouse Hopper	2004			
	DD-201-W12- 210	Baghouse Drum Dumper	2003	7.08, 5.21, 40 CFR 63 VVVVVV	DC-201-W12-210	S-201-W12- 001
	T-201-W12-210	Mix Tank				001
201- W17	T-201-W17-001	Formic Acid Tank	1990	7.25	NA	NA
	T-201-W17-002	Mixing Tank		7.08	DC-201-W17-001	C 201 W17
	T-201-W17-005	Mixing Tank	1990			S-201-W17- 001
	T-201-W17-004	Mixing Tank				001
	DD-201-W17- 001	Drum Dumper	1997	7.08	DC-201-W17-002	S-201-W17- 002
	T-201-W17-008	Mixing Tank				002
	FR-201-W17- 001	Filter Receiver	2006	7.08	FIL-201-W17-001	S-201-W17- 003

$201\text{-}W11, 201\text{-}W12 \ and \ 201\text{-}W17 \ Control \ Devices$

Control ID	Description	Stack ID
DC-201-W11-150	Baghouse (99.055%), Aeropulse, Model 216-8-20	S-201-W11-001
DC-201-W11-190	Baghouse (99.343%), Flex-Kleen, Model 84BvBS-16	S-201-W11-002
DC-201-W12-210	Baghouse (99.786%), Donaldson Torit, Model DF-2DF4	S-201-W12-002
DC-201-W12-250	Baghouse (99.055%), MikroPul, Model Unknown	S-201-W12-002
DC-201-W12-290	Baghouse (99.546%), Libco, Model Unknown	S-201-W12-003
DC-201-W17-001	Baghouse (99.786%), Donaldson Torit DFT2-12	S-201-W17-001
DC-201-W17-002	W17-002 Baghouse (99.343%), MikroPul, Model 9-8	
ED-201-W12-270	Eductor (95%), Schutte & Koerting, Model 7010	S-201-W12-004
FIL-201-W17-001	Baghouse (95%), Mac Equipment, Model 39RTC7	S-201-W17-003
SC-201-W12-275	Scrubber (95% (PM), 75% (VOC)), WW Sly, Model 240 Impinjet Packed Tower Scrubber	S-201-W12-004
SEP-201-W11-140	Cyclone (86.17%), G.H. Hicks	S-201-W11-001
SEP-201-W12-240	Cyclone (86.17%), G.H. Hicks	S-201-W12-002
SEP-201-W12-260	Power Cyclone (95%), Aerodyne Development Co. Power Cyclone 6000	S-201-W12-260

201-W11, 201-W12 and 201-W17 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause the PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EU	EP	Emission Limit (lb/hr)
201-	DD-201-W11-110	4.12
W11	SD-201-W11-130 (and SD-201-W11-130A)	2.62
	SEP-201-W11-180	2.34
201- W12	PD-201-W12-001, PD-201-W12-002, PD-201-W12-003, T-201-W12-210, H-201-W12-295, SEP-201-W12-280	2.34 each
	SD-201-W12-230	2.62
201- W17	T-201-W17-002, T-201-W17-004, T-201-W17-005, T-201-W17-008, DD-201-W17-001, T-201-W17-001 and FR-201-W17-001	2.34 each

ii. See <u>Source-Wide Conditions S1.a.</u>

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

- i. The owner or operator shall perform Tier 4 modeling for copper emissions from EU 201-W11 to demonstrate compliance with the EA goals or cease production of select copper-containing products to comply with the EA goals by September 22, 2014. (See Comment 3.)
- ii. Source-Wide Conditions S1.d. (See Comment 3.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-201-W17-001, DC-201-W11-150, DC-201-W11-190, SEP-201-W12-260, ED-201-W12-270, SC-201-W12-275, DC-201-W12-250, DC-201-W12-290, DC-201-W12-210, DC-201-W17-002 and FIL-201-W17-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-201-W11-150, DC-201-W11-190, DC-201-W12-250, DC-201-W12-290, FR-201-W17-001, FIL-201-W17-001	1.0 – 7.0
DC-201-W17-001, DC-201-W17-002	0.5 - 10.0
DC-201-W12-210	3.0 - 6.5
SC-201-W12-275	5.0 – 15.0

iii. The owner or operator shall monitor and record the water flowrate at least once during each operating day to ensure they are maintained within the operating ranges as shown in the table below.

	Control ID	Inlet Flowrate (gpm)	Makeup Rate (gpm)
ſ	ED-201-W12-270	≥ 325	18
	SC-201-W12-275	3 – 15	NA

- iv. For any period of operating outside the established performance indicator range for a control device, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for DC-201-W11-150, DC-201-W11-190, DC-201-W12-250, DC-201-W12-290, DC-201-W12-210, and SC-201-W12-275 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.
- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

201-W11, 201-W12 and 201-W17 Comments

- 1. The potential controlled hourly PM emissions for EP DD-201-W11-110, SD-201-W11-130, SEP-201-W11-180, SD-201-W12-230a/SEP-201-W12-240, SD-201-W12-230b/SEP-201-W12-240, SEP-201-W12-280, T-201-W12-210, DD-201-W12-210, and T-201-W17-005 meet the applicable emission standards in Regulation 7.08. The potential uncontrolled PM emissions for EP SD-201-W11-130A, PD-201-W12-001, PD-201-W12-002, PD-201-W12-003, H-201-W12-295, T-201-W17-002, T-201-W17-004, DD-201-W17-001, T-201-W17-008 and FR-201-W17-001 meet the applicable emission standards in Regulation 7.08.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. Except where a tier 1, 2 or 3 analysis is noted, the potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	EP	Co	Cr(III)	Cu	Mn	Ni	NH ₃
	DD-201-W11-110			Tier 3	Tier 3	1 st	
	SD-201-W11-130			Tier 3	Tier 3	2 nd	
201-		Tier 1,					
W11		See	2 nd		2 nd		*
		Comment	2		2		-
	SD-201-W11-130A	5.					
	SD-201-W12-230a/SEP-			See		Tier 2	
	201-W12-240			Comment 4.		1101 2	
201-	SD-201-W12-230b	Tier 1,		Tier 3	5 th	5 th	
W12	/SEP-201-W12-240	See		1161 3	3	3	
	PD-201-W12-001	Comment		1 st	1^{st}	1^{st}	
	T-201-W12-210 and	5.		Tion 2	1 st	Tion 2	
	DD-201-W12-210			Tier 3	1	Tier 3	

For the emission points with emissions above the averaging period de minimis levels, the source performed a tier 1, 2 or 3 analysis, resulting in the following risks and hazard quotients. For Copper emissions from EP DD-W11-110, see Comment 4.

EU	EP	TAC	Location	Risk	Status	HQ	Status
	DD-W11-110	Cu	unadjusted			1.81	≤ 1.0
		Mn	unadjusted			0.66	≤ 1.0
201-W11	SD-W11-130	Cu	unadjusted			0.75	≤ 1.0
201-W11		Mn	unadjusted			0.27	≤ 1.0
	SD-201-W11- 130A	Co	unadjusted	See			≤ 1.0
		Co		Comment 5.			
	SD-W12-230b	Cu	unadjusted			0.01	≤ 1.0
	/SEP-201-	Ni	unadjusted	0.11	≤ 1.0		≤ 1.0
	W12-240	111		0.11		0.009	
201-W12	DD-W12-210 and T-W12-	Co	unadjusted	See			≤ 1.0
		Co		Comment 5.			
	210	Cu	unadjusted			0.258	≤ 1.0
		Ni	unadjusted	0.57	≤ 1.0	0.044	≤ 1.0

- 4. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for copper by September 22, 2014, 36 months after notification by the District that the BAC for copper became more stringent. Clariant submitted a compliance plan on April 8, 2013.
- 5. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 by removing cobalt-containing products from EU 201-W11 and EU 201-W12, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014.
- 6. Drum Dumper DD-201-W12-200 and Wash Tank T-201-W12-200 were removed.

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^{*}This emission point can meet the de minimis value without a control device.

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 201-W13: #3 Spray Dryer; Spray drying of slurries of metal oxides

201-W13 Applicable Regulations

Federally Enforceable Regulations					
Regulation Title Applicable Sections					
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide			
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions			

District Only Enforceable Regulations						
Regulation	Regulation Title Applicable Sections					
<u>5.00</u>	Definitions	1 through 2				
<u>5.01</u>	General Provisions	1 through 4				
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3				
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5				
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6				

201-W13 Emission Points

EP	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
SD-201-W13-330	#3 Spray Dryer (95%)	1990	7.08, 5.21, 40 CFR 63	SEP-201-W13-240 DC-201-W13-350 FIL-201-W13-350	S-201- W13-001
VS-201-W13- 330/Product Drum	Vibratory Screener/Product Drum	1990	VVVVVV	DC-201-W13-350 FIL-201-W13-350	S-201- W13-001
DD-201-W13-310 T-201-W13-310	Drum Dumper Mix Tank	1990	7.08, 5.21, 40 CFR 63 VVVVVV	DC-201-W13-360 FIL-201-W13-360	S-201- W13-002

201-W13 Control Devices

Control ID	Control ID Description	
DC-201-W13-350	Baghouse (99.055%), MikroPul, Model 221S-8-20-TR	S-201-W13-001
DC-201-W13-360	Baghouse (99.786%), Torit, Model DFT2-4	S-201-W13-002
FIL-201-W13-350	HEPA Filter (99.97%), Donaldson Torit Ultra Lok 2 x 2	S-201-W13-001
FIL-201-W13-360	HEPA Filter (99.97%)	S-201-W13-002
SEP-201-W13-240	Cyclone (95%), Niro CHE	S-201-W13-001

201-W13 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow the PM emissions to exceed 2.34 lb/hr from EP DD-201-W13-310, SD-201-W13-330, SEP-201-W13-340, T-201-W13-310, and VS-201-W13-330. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 3.)

e. Control Device Operation

The owner or operator shall operate and maintain the PM control devices at all times an associated emission point is in operation. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of the control devices for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID Pressure Drop (" v	
DC-201-W13-350	0.5 - 8.0
FIL-201-W13-350	0.2 - 5.0

- iii. For any period of operating outside the established pressure drop range for DC-201-W13-350 and/or FIL-201-W13-350, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop range for DC-201-W13-350 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.d.</u>

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

201-W13 Comments

- 1. The potential controlled PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	EP	Cu	Ni
201- W13	DD-201-W13-310, VS-201-W13-330/Product drum and T-201-W13-310	1 st	2 nd
W 13	SD-201-W13-330	2 nd	2^{nd}

EU 201-W16: Sweeper System; Transfer of floor sweepings into a 55 gallon drum

201-W16 Applicable Regulations

Federally Enforceable Regulations			
Regulation	Title	Applicable Sections	
6.09	Standards of Performance for Existing Process Operations	1, 2, 3 and 5	
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide	
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions	

	District Only Enforceable Regulations				
Regulation	Title	Applicable Sections			
<u>5.00</u>	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

201-W16 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
H-201-W16-001	Receiving Hopper	1973	6.09, 5.21, 40 CFR	DC-201-	S-201-W16-001
PD-201-W16-001	Product Drum	1973	63 VVVVVV	W16-001	3-201-W 10-001

201-W16 Control Devices

Control ID	Description	Stack ID
DC-201-W16-001	Fabric Filter (99.343%), MikroPul, Model 25S-8-30	S-201-W16-001

201-W16 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause the PM emission to exceed 2.58 lb/hr from EP H-201-W16-001 and 201-W16-Drum. (Regulation 6.09, section 3.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 3.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-201-W16-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop across DC-201-W16-001 at least once during each operating day to ensure it is maintained between 2.0 and 6.5" w.c.
- iii. For any period of operating outside the established pressure drop range for DC-201-W16-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a

negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

201-W16 Comments

- 1. The potential uncontrolled hourly PM emissions from EP H-201-W16-001 and PD-201-W16-001 meet the applicable emission standard in Regulation 6.09.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	EP	Co	Cr(III)	Cu	Ni
201-	H-201-W16-001	*	*	1^{st}	1 st
W16	PD-201-W16-001	*	*	1^{st}	1^{st}

^{*}This emission point can meet the de minimis value without a control device.

4. There are no emissions from CV-201-W16-001 (Screw Conveyor), which is a fully enclosed feed screw conveyor.

EU 201-W60: Nickel Rack Dumper and Product Drum

201-W60 Applicable Regulations

Federally Enforceable Regulations			
Regulation	Title	Applicable Sections	
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3	
40 CFR 63 Subpart VVVVVV	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	See <u>Source-Wide</u> <u>Specific Conditions</u>	

	District Only Enforceable Regulations				
Regulation	Title	Applicable Sections			
<u>5.00</u>	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

201-W60 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control ID	Stack ID
DD-201-W60-001	Nickel Rack Dumper (was DD-204-W39- 400)	2007	7.08, 5.21, 40 CFR 63	DC-201-W60-001 FIL-201-W60-001	S-201-
PD-201-W60-001	Product Drum (was 204-W39)	2008	VVVVV		W04-001

201-W60 Control Devices

Control ID	Description	Stack ID
DC-201-W60-001	Baghouse (99.786%), Donaldson, Model Torit DFT 3-24	S-201-W60-001
FIL-201-W60-001	HEPA (99.97%), Torit 2x3 Ultra-Web	S-201-W60-001

201-W60 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow PM emissions to exceed 9.74 lb/hr from EP DD-201-W60-001 and PD-201-W60-001. (Regulation 7.08, section 3.1.2). (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 3.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-201-W04-001 and FIL-201-W60-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop across DC-201-W60-001 and FIL-201-W60-001 at least once during each operating day to ensure it is maintained between 0.1 and 5.0" w.c.
- iii. For any period of operating outside the established pressure drop range for DC-201-W04-001 and/or FIL-201-W60-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a

negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.d.</u>

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

201-W60 Comments

- 1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after DC-201-W60-001.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential controlled TAC emissions of nickel compounds for EU 201-W60 after the HEPA filter are de minimis.

EU 202-W18: Screening System; Four product screening systems and a repack station

202-W18 Applicable Regulations

Federally Enforceable Regulations			
Regulation	Title	Applicable Regulation	
<u>6.09</u>	Standards of Performance for Existing Process Operations	1 through 3	
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide	
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions	

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
<u>5.00</u>	Definitions	1 through 2	
<u>5.01</u>	General Provisions	1 through 4	
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3	
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5	
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6	

202-W18 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID	
DD-202-W18-001	Drum Dumper 1					
H-202-W18-001	Hopper 1]		DC-202-W18-001	g 202	
FD-202-W18-001	Feeder 1			DC-202-W18-005	S-202- W18-001	
VS-202-W18-001	Screener 1			FIL-202-W18-001	W 16-001	
PD-202-W18-001	Product Drum 1					
DD-202-W18-002	Drum Dumper 2			DC-202-W18-002	g 202	
H-202-W18-002	Hopper 2			DC-202-W18-005	S-202- W18-001	
BD-202-W18-002	Big Bagger 2			FIL-202-W18-001	W 16-001	
DD-202-W18-003	Drum Dumper 3	1967				
H-202-W18-003	Hopper 3			6.00 5.01 40	DC-202-W18-003	g 202
FD-202-W18-003	Feeder 3		6.09, 5.21, 40	DC-202-W18-005	S-202- W18-001	
VS-202-W18-003	Screener 3		CFR 63 VVVVVV	FIL-202-W18-001	W 16-001	
PD-202-W18-003	Product Drum 3		V V V V V			
DD-202-W18-004	Drum Dumper 4					
H-202-W18-004	Hopper 4					
FD-202-W18-004	Feeder 4					
VS-202-W18-004	Screener 4			DC 202 W10 004		
PD-202-W18-004	Product Drum 4			DC-202-W18-004	S-202-	
DD-202-W18-005	Drum Dumper 5]		DC-202-W18-005 FIL-202-W18-001	W18-001	
H-202-W18-005	Hopper 5	1975		F1L-202-W10-001		
VS-202-W18-005	Screener 5	19/3				
FD-202-W18-005	Feeder 5]				
PD-202-W18-005	Product Drum 5					

202-W18 Control Devices

Control ID	Description	Stack ID
DC-202-W18-001	Baghouse 201 (99.786%), Torit, Model DFT-2-8, 2008	
DC-202-W18-002	Baghouse 202 (99.343%), Consolidated Engineering, Model WS-25-8,	
DC-202-W 10-002	1967	S-202-
DC-202-W18-003	Baghouse 203 (99.786%), Torit, Model DFT-2-8, 2008	W18-001
DC-202-W18-004	Baghouse 204 (99.786%), Torit, Model DFT-2-8, 2008	
DC-202-W18-005	Baghouse 204 (99.786%), Torit, Model DFT-3-12, 2008	
FIL-202-W18-001	HEPA Filter 205H (99.97%), Donaldson, Model Ultralock, 2008	

202-W18 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause the PM emissions to exceed 12.05 lb/hr from each PM emission point. (Regulation 6.09, section 3.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See <u>Source-Wide Conditions S1.b.</u> (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 3.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 6.09 section 3.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-202-W18-001, DC-202-W18-002, DC-202-W18-003, DC-202-W18-004, DC-202-W18-005 and FIL-202-W18-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-202-W18-005, FIL-202-W18-001	0.1 - 6.5
DC-202-W18-001, DC-202-W18-002, DC-202-W18-003, DC-202-W18-004	0.4 – 7.5
FIL-202-W18-001	1.0 - 9.0

- iii. For any period of operating outside the established pressure drop range for DC-202-W18-001, DC-202-W18-002, DC-202-W18-003, DC-202-W18-004, DC-202-W18-005 and/or FIL-202-W18-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

iv. Upon notification to the District, the owner or operator may modify the pressure drop ranges for DC-202-W18-001, DC-202-W18-002, DC-202-W18-003, DC-202-W18-004, DC-202-W18-005, and FIL-202-W18-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

202-W18 Comments

- 1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 6.09 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.

3. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	Emission Point	Co	Cr(III)	Cr(IV)	Cu	Mn	Ni
202- W18	BD-202-W18-002; DD-202-W18-001, -002, -003, -004 and -005; FD-202-W18-005; H-202-W18-001, -002, -003, -004 and -005; PD-202-W18-001, -003, -004 and -005; VS-202-W18-005	Final	Final	Final	1	Final	Final
	FD-202-W18-001, -003 and -004; VS-202- W18-001, -003 and -004	Final	Final	Final	Final	Final	Final

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 203-W19: Alumina Grinding System; Fine grinding of rework materials

203-W19 Applicable Regulations

Federally Enforceable Regulations				
Regulation	Regulation Title Applicable Sections			
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3		

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
NA	NA	NA

203-W19 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
DD-203-W19-200/H-203- W19-201	Drum Dumper/Feed Hopper				
M-203-W19-201/FD-203- W19-200	Crusher/Screw Feeder			FR-203-W19-	S-203-
M-203-W19-201/FD-203- W19-204	Crusher/Fitz Mill Feeder	2001	7.08	203 FIL-203-W19-	W25- 001
M-203-W19-202	Fine Grinder			203	
M-203-W19-205	Fitz Mill Grinder				
PD-203-W19-001	Product Drum				

203-W19 Control Devices

Control ID	Description	Stack ID
FR-203-W19-203	Filter Receiver (99.489%), Mac Equipment, Inc.	S-203-W25-001
FIL-203-W19-203	Cartridge Filter (95%), Solberg 275P	3-203-W23-001

203-W19 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause the PM emissions to exceed 2.62 lb/hr from EP DD-203-W19-200/ H-203-W19-201, M-203-W19-201/FD-203-W19-200, M-203-W19-201/FD-203-W19-204, M-203-W19-202, M-203-W19-205 and PD-203-W19-001. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

i. See Source-Wide Conditions S1.b.

c. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, and 7.08 section 3.1.2)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and FIL-203-W19-203 was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

See Source-Wide Conditions S2.c.

c. Control Device Operation

i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of FR-203-W19-203 and FIL-203-W19-203 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

- ii. For FIL-203-W19-203, the owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained between 1 and 7 " w.c.
- iii. For any period of operating outside the established pressure drop range for FIL-203-W19-203, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop range for FIL-203-W19-203 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in 203-W19 S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

See Source-Wide Conditions S3.b.

c. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.c.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

203-W19 Comments

1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device.

EU 203-W22: C Kiln Manufacturing; Heat treating of catalyst carriers

203-W22 Applicable Regulations

	Federally Enforceable Regulations				
Regulation	Title	Applicable Sections			
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 4			
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5			
<u>7.09</u>	Standards of Performance for New Process Gas Streams	1, 2, and 4			

	District Only Enforceable Regulations				
Regulation	Title	Applicable Sections			
5.00	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

203-W22 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
HT-203-W22-900	Tunnel Kiln, 8 MMBtu/hr	2000	7.08, 7.09, 7.25	TO-203- W22-900	S-203-W22-001
VS-203-W22-901	Vibrating Screener	2000	7.08		
SH-203-W22-905	Sagger Loader/Unloader	2000	7.08, 5.21	DC-203- W22-902	S-203-W22-004
DD-203-W22-906	Drum Dumper	2000	7.08, 5.21		
CV-203-W22-903	Accumulator Table	2000	7.08, 5.21		
SL-203-W22-916	Soft Loader	2000	7.08	NA	NA

203-W22 Control Devices

Control ID	Description	Stack ID
TO-203-W22-900	Thermal Oxidizer (99.90%), Swindell Dressler	S-203-W22-001
DC-203-W22-902	Baghouse (99.489%), Mac Equipment, Model 3MTF24 Mactiflo	S-203-W22-004

203-W22 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause the PM emissions to exceed 2.34 lb/hr from EP VS-203-W22-901, SH-203-W22-905, DD-203-W22-906, CV-203-W22-903 and SL-203-W22-916. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See <u>Source-Wide Conditions S1.a.</u>

b. **Opacity**

See Source-Wide Conditions S1.b.

c. NO_X

- i. For EP HT-203-W22-900, the owner or operator shall not allow or cause the emissions of NO_X to exceed 300 ppmv, expressed as NO_2 . (See Comment 2.)
- ii. See Source-Wide Conditions S1.a.

d. VOC

- i. The owner or operator shall operate and maintain the thermal oxidizer TO-203-W22-900 at a control efficiency of 99.90%. (BACT) (Regulation 7.25, section 3.1) (See Comment 4.)
- ii. See Source-Wide Conditions S1.a.

$e. SO_2$

The owner or operator shall not allow or cause the emissions of SO₂ to exceed 28.63 grains per 100 dscf from EP HT-203-W22-900. (Regulation 7.09, Section 4) (See Comment 5.)

f. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 3.)

g. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 7.25, section 3.1, and 7.08 section 3.1.2)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

See Source-Wide Conditions S2.c.

c. NO_X

See Source-Wide Conditions S2.d.

d. VOC

- i. For any period of time when the process was operating and TO-203-W22-900 was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The VOC emissions (lb/hr and total tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.a.

e. SO_2

There are no SO₂ monitoring or record keeping requirements for EU 203-W22.

f. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;

- 3) The emissions of each TAC (lb/hr and lb/avg. period); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

g. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-203-W22-902 and TO-203-W22-900 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop across DC-203-W22-902 at least once during each operating day to ensure it is maintained between 1.0 and 6.5" w.c.
- iii. The owner or operator shall monitor and maintain records of the combustion chamber temperature of TO-203-W22-900 at least once during each operating day to assure a minimum temperature of 1400°F.
- iv. For any period of operating outside the established performance indicator range for DC-203-W22-902 and/or TO-203-W22-900, the owner or operator shall maintain the following records:
 - 1) The date.
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

See Source-Wide Conditions S3.b.

$c. NO_X$

See Source-Wide Conditions S3.a.

d. VOC

i. Identification of all periods of bypassing TO-203-W22-900 while an associated emission point was in operation during a reporting period, including the information in S2.d.i., or a negative declaration if there were no periods of bypassing a control device during the reporting period.

ii. See Source-Wide Conditions S3.a.

e. SO_2

There are no SO₂ reporting requirements for this emission unit.

f. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.f.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

g. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.g.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

203-W22 Comments

- 1. The potential controlled hourly PM emissions from EP VS-203-W22-901 and SH-203-W22-905 meet the applicable emission standard in Regulation 7.08 after the first control device. The potential uncontrolled hourly PM emissions from EP DD-203-W22-906, CV-203-W22-903 and SL-203-W22-916 meet the applicable emission standard in Regulation 7.08.
- 2. The potential uncontrolled NO_X emissions from EP HT-203-W22-900 meet the emission standard in Regulation 7.08.
- 3. The potential uncontrolled TAC emissions of ammonia from EP HT-203-W22-900 and nitric acid from EP SH-203-W22-905, DD-203-W22-906 and CV-203-W22-903 are below the de minimis levels in Regulations 5.00 and 5.21.
- 4. The District has determined that the thermal oxidizer TO-203-W22-900 represents BACT level of control for VOC for HT-203-W22-900.
- 5. The potential uncontrolled SO_2 emissions are below the emission standard in Regulation 7.09.

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EU 203-W23: Catalyst drying

203-W23 Applicable Regulations

Federally Enforceable Regulations			
Regulation	Title	Applicable Sections	
NA	NA	NA	

District Only Enforceable Regulations				
Regulation	Title	Applicable Sections		
<u>5.00</u>	Definitions	1 through 2		
<u>5.01</u>	General Provisions	1 through 4		
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5		
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6		

203-W23 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
HT-203-W23-534	Box Dryer, Wisconsin Oven, 2.5 MMBTU/hr	2003	5.21	SC-203-W23-550	S 202 W22 005
HT-203-W23-542	Box Dryer, Wisconsin Oven, 2.5 MMBTU/hr	2003	5.21	SC-203-W 23-330	S-203-W 23-003

203-W23 Control Devices

Control ID Description		Stack ID
SC-203-W23-550	Packed-bed Scrubber with Mesh Pad (75%), Sly, Model 54-72	S-203-W23-005

203-W23 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 1.)

b. **Control Device Operation**

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 5.00 and 5.21)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

b. **Control Device Operation**

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of SC-203-W23-550 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop of SC-203-W23-550 at least once during each operating day to ensure it is maintained between 1.0 and 8.0 "w.c..
- iii. The owner or operator shall monitor and record the inlet water flowrate of SC-203-W23-550 at least once during each operating day to ensure it is maintained above 10 gpm.

iv. For any period of operating outside the established performance indicator range for SC-203-W23-550, the owner or operator shall maintain the following records:

- 1) The date,
- 2) The observed performance indicator value,
- 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

b. **Control Device Operation**

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.b.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

203-W23 Comments

- 1. The potential controlled ammonia emissions from EP HT-203-W23-534 and HT-203-W23-542 meet the de minimis levels in Regulations 5.00 and 5.21.
- Incline Belt Conveyor CV-203-W23-515, Conveyers CV-203-W23-516, CV-203-W23-514, CV-203-W23-913/912/911 and CV-203-W23-932/931/930, Drum Dumper DD-203-W23-522, Thermal Screw DR-203-W23-515, Feed Conveyors FD-203-W23-571 and FD-203-W23-572, Fines Filter Receiver FR-203-W23-500, Filter Receivers FR-203-W23-505, FR-203-W23-513, FR-203-W23-571, FR-203-W23-572 and FR-203-W23-558, Dense Phase Filter Receivers FR-203-W23-526, FR-203-W23-527, FR-203-W23-552 and FR-203-W23-560, Hopper/Tablet Machines H/TM-203-W23-526 and H/TM-203-W23-527, Bag Dump Hoppers H-203-W23-501, H-203-W23-502, and H-203-W23-504, Supersack Unloading Hopper H-203-W23-503, Hoppers H-203-W23-517, H-203-W23-522, H-203-W23-553/556, H-203-W23-557, H-203-W23-559, Diamondback Hopper H-203-W23-561, Hand Ingredient Addition Charging Hopper H-203-W23-574-C, Hand Ingredient Addition Discharging Hopper H-203-W23-574-DC, Hammer Mill M-203-W23-516, Mixer MX-203-W23-514, Tank T-203-W23-512, Scalping Screen VS-203-W23-516, and Vibrating Screener VS-203-W23-558 were removed.

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EU 203-W24: HATA Tabletting Machine

203-W24 Applicable Regulations

Federally Enforceable Regulations				
Regulation Title Applicable Sections				
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3		
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide		
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions		

District Only Enforceable Regulations				
Regulation	Title	Applicable Sections		
<u>5.00</u>	Definitions	1 through 2		
<u>5.01</u>	General Provisions	1 through 4		
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3		
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5		
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6		

203-W24 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID	
DD-203-W24-001	Drum Dumper	2009				
H-203-W24-001	Hopper	2009		DC-203-W24-001 FIL-203-W24-001	S-203-W24-	
TM-203-W24-001	Tabletting Machine	2008	7.08, 5.21, 40			
DU-203-W24-001	Deduster	2008	CFR 63			001
DB-203-W24-001	Deburring Machine	2011	VVVVVV		001	
PD-203-W24-001	Product Drumming	2008]			
	Station	2008				

203-W24 Control Devices

Control ID Description		Stack ID
DC-203-W24-001	Fabric Filter (99.786%), Torit DFT 3-6	S-203-W24-001
FIL-203-W24-001	HEPA Filter (99.97%), Torit Ultra-web 1x1	S-203-W24-001

203-W24 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause PM emissions to exceed 2.34 lb/hr from each emission point. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 3.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-203-W24-001 and FIL-203-W24-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-203-W24-001, FIL-203-W24-001	1.0 - 7.0

- iii. For any period of operating outside the established pressure drop range for DC-203-W24-001 and/or FIL-203-W24-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.d.</u>

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

203-W24 Comments

- 1. From EP DD-203-W24-001, H-203-W24-001 and TM-203-W24-001, the potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device. From EP DU-203-W24-001, DB-203-W24-001 and PD-203-W24-001, the potential uncontrolled hourly PM emissions meet the applicable PM emission standard in Regulation 7.08.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	U Emission Point		Ni
203-	DD-203-W24-001, H-203-W24-001, TM-203-W24-001, DU-203-W24-001,	1 st	and
W24	DB-203-W24-001, PD-203-W24-001	1	2

EU 203-W25: Specialty Extrusion Manufacturing; Raw material weighing, mixing, forming, drying and calcining

203-W25 Applicable Regulations

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
7.08	Standards of Performance for New Process Operations	1 through 4		
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5		

District Only Enforceable Regulations				
Regulation	Title	Applicable Sections		
<u>5.00</u>	Definitions	1 through 2		
<u>5.01</u>	General Provisions	1 through 4		
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5		
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6		

203-W25 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
FR-203-W25-100	Fines Filter Receiver	2001	7.08, 5.21	FIL-203-W25-100	g 202
H-203-W25-101	Bag Dump Station	2001	7.08	BV-203-W25-101	S-203- W25-001
H-203-W25-102	Bag Dump Station	2001	7.08, 5.21	BV-203-W25-102	W 23-001
H-203-W25-103	Bag Dump Station	2001	7.08	BV-203-W25-103	
H-203-W25-104 - 105	2 Supersack Unloading Hoppers	2001	7.08, 5.21		
FR-203-W25-113	Filter Receiver (99.786%)				
H-203-W25-112	Hopper				
H-203-W25-113	Hopper				S 202
FR-203-W25-114	Filter Receiver (99.786%)	2001	7.08	DC-203-W25-128	S-203- W25-001
H-203-W25-114	Hopper				
H-203-W25-115	Hopper				
FR-203-W25-115	Filter Receiver (99.786%)				
MX-203-W25-100	Mixer				
FR-203-W25-125	Filter Receiver (99.489%)	2001	7.08	FIL-203-W25-125	S-203- W25-001
T-203-W25-117	Liquid Weigh Tank	2001	7.25, 5.21		
HT-203-W25- 100HZ	Belt Dryer, heating zone, 1.2 MMBtu/hr	2001	7.08, 7.25, 5.21		
HT-203-W25- 106HZ	Precalciner Heating Zone	2001	7.08, 5.21	ED-203-W25-200 SC-203-W25-133	S-203- W25-003
T-203-Acid-801	Acetic Acid Day Tank	2001	7.25		
T-203-Acid-802	HNO ₃ Day Tank	2001	5.21		
H-203-W25-129	Bag Dump Station	2001	7.08	BV-203-W25-129	S-203- W25-001

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
FD-203-W25-129	Screw Conveyor	2001			C 202
CV-203-W25-123	Belt Conveyor		7.08	DC-203-W25-140	S-203- W25-001
SDR-203-W25-100	Spherodizer Drum				W 23-001
HT-203-W25-	Belt Dryer Cooling				
100CZ-D	Zone/Dryer	2001	7.08, 5.21		
	Discharge				
BE-203-W25-111	2 Bucket Elevators	2001	7.08, 5.21		
& 115		2001	7.08, 3.21		
CV-203-W25-134	Belt Conveyor	2001	7.08, 5.21		
CV-203-W25-112	Belt Conveyor	2001	7.08, 5.21		
RS-203-W25-134	2 Rotary Screeners	2001	7.08		
& 135		2001	7.08		
FD-203-W25-134	Belt Conveyor	2001	7.08		0.000
H-203-W25-134 &	2 Hoppers	2001	7.08	DC-203-W25-140	S-203-
135		2001	7.08		W25-001
PA-203-W25-134	2 Packagers	2001	7.08		
& 135		2001	7.08		
H-203-W25-136	Feed Hopper	2001	7.08, 5.21		
DD-203-W25-131	Drum Dumper	2001	7.08		
HT-203-W25-106D	Precalciner	2001	7.08		
FD-203-W25-135	Belt Feeder	2001	7.08		
GR-203-W25-101	Granulator	2009	7.08, 5.21		
VS-203-W25-102	Ajax Screener	2009	7.08, 5.21		
VS-203-W25-101	Ajax Screener	2009	7.08, 5.21		

203-W25 Control Devices

Control ID	Description	Stack ID
BV-203-W25-101	Bin Vent Filter (99.489%), MAC Equipment, Model 2MTF2	S-203-W25-001
BV-203-W25-102	Bin Vent Filter (99.489%), MAC Equipment, Model 2MTF2	S-203-W25-001
BV-203-W25-103	Bin Vent Filter (99.489%), MAC Equipment, Model 2MTF2	S-203-W25-001
BV-203-W25-129	Bin Vent Filter (99.489%), MAC Equipment, Model 2MTF2	S-203-W25-001
DC-203-W25-128	Baghouse (99.489%), MAC Equipment, Model 3MTF6	S-203-W25-001
DC-203-W25-140	Baghouse (99.786%), Donaldson Co., Model Torit DownfloII 3-24	S-203-W25-001
ED-203-W25-200	Ejector-Venturi Gas Scrubber (95% (PM), 75% (NH3)), Schutte & Koerting, Model 20"	S-203-W25-003
FIL-203-W25-100	Cartridge Filter (95%), MAC Equipment	S-203-W25-001
FIL-203-W25-125	Cartridge Filter (95%), MAC Equipment	S-203-W25-001
SC-203-W25-133	Packed-bed Scrubber with Mist Eliminator (95% (PM), 75% (NH3)), Sly Model 54-72	S-203-W25-003

203-W25 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause the PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
FR-203-W25-100, H-203-W25-101, H-203-W25-102, H-203-	4.62
W25-104, H-203-W25-105, FR-203-W25-125	
H-203-W25-103, FR-203-W25-113, H-203-W25-113, FR-203-	2.34
W25-114, H-203-W25-114, FR-203-W25-115, H-203-W25-115,	
MX-203-W25-100, H-203-W25-129, FD-203-W25-129, CV-203-	
W25-123, SDR-203-W25-100	
HT-203-W25-100HZ, HT-203-W25-100CZ-D, BE-203-W25-111,	3.00
BE-203-W25-115, RS-203-W25-134, RS-203-W25-135, CV-203-	
W25-134, CV-203-W25-112, FD-203-W25-134, H-203-W25-134,	
H-203-W25-135, PA-203-W25-134, PA-203-W25-135, H-203-	
W25-136, DD-203-W25-131, HT-203-W25-106HZ, HT-203-	
W25-106D, FD-203-W25-135, GR-203-W25-101, VS-203-W25-	
102, VS-203-W25-101	

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

i. See Source-Wide Conditions S1.b.

c. VOC

- i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3) (See Comment 3.)
- ii. See Source-Wide Conditions S1.a.

d. NO_X

- i. The owner or operator shall not allow or cause the NO_X emissions from EP HT-203-W25-106HZ to exceed 300 ppm by volume, expressed as NO_2 .
- ii. See Source-Wide Conditions S1.a.

e. TAC

See Source-Wide Conditions S1.d. (See Comment 2.)

f. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, and Regulation 7.08 section 3.1.2)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See <u>Source-Wide Conditions S2.b.</u>

b. **Opacity**

See Source-Wide Conditions S2.c.

c. VOC

See Source-Wide Conditions S2.a.

d. NO_X

See Source-Wide Conditions S2.d.

- e. TAC
 - i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
 - ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of BV-201-W06-005, FIL-201-W06-008, FIL-201-W06-009 and ED-201-W06-029 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-203-W25-140	1.0 - 6.5
BV-203-W25-101, BV-203-W25-102, BV-203-W25-103, DC-203-W25-128, FIL-203-W25-100, FIL-203-W25-125	1.0 – 7.0
BV-203-W25-129	1.0 - 5.5

iii. The owner or operator shall monitor and record the inlet water flowrate at least once during each operating day to ensure it is maintained within the operating ranges as shown in the table below.

Control ID	Inlet Water Flowrate (gpm)
ED-203-W25-200	≥ 50
SC-203-W25-133	≥ 10

- iv. For any period of operating outside the established performance indicator range for BV-203-W25-101, BV-203-W25-102, BV-203-W25-103, BV-203-W25-129, DC-203-W25-128, DC-203-W25-140, ED-203-W25-200, FIL-203-W25-100, FIL-203-W25-125 and/or SC-203-W25-133, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for BV-203-W25-101, BV-203-W25-102, BV-203-W25-103, BV-203-W25-129, DC-203-W25-128, DC-203-W25-140, ED-203-W25-200, FIL-203-W25-100, FIL-203-W25-125, and SC-203-W25-133, once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.
- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with

General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.
- b. **Opacity**

See Source-Wide Conditions S3.b.

c. **VOC**

See Source-Wide Conditions S3.a.

d. NO_x

See Source-Wide Conditions S3.a.

- e. TAC
 - i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
 - ii. See Source-Wide Conditions S3.d.

f. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

203-W25 Comments

1. The potential hourly PM emissions meet the applicable PM emission standards in Regulation 7.08, with the controls needed as identified in the following table.

Emission Point	Control Needed
FR-203-W25-100, H-203-W25-101, H-203-W25-102, H-203-W25-103, H-	1st control
203-W25-104, H-203-W25-105, H-203-W25-113, H-203-W25-114, H-203-	
W25-115, FR-203-W25-125, T-203-W25-117, MX-203-W25-100, CV-203-	
W25-123, SDR-203-W25-100, HT-203-W25-100HZ, HT-203-W25-100CZ-	
D, BE-203-W25-111, BE-203-W25-115, RS-203-W25-134, RS-203-W25-	
135, CV-203-W25-112, H-203-W25-135, H-203-W25-136, DD-203-W25-	
131, HT-203-W25-106HZ, HT-203-W25-106D, GR-203-W25-101, VS-203-	
W25-102, VS-203-W25-101	

FR-203-W25-113, FR-203-W25-114, FR-203-W25-115, H-203-W25-129,	Uncontrolled
FD-203-W25-129, CV-203-W25-134, FD-203-W25-134, H-203-W25-134,	
PA-203-W25-134, PA-203-W25-135, FD-203-W25-135, T-203-Acid-801, T-	
203-Acid-802	

2. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	Emission Point	HNO ₃	NH_3
	HT-203-W25-100HZ	2^{nd}	1
	HT-203-W25-100CZ-D, T-203-Acid-802, GR-203-W25-101, VS-203-W25-	1 st	
203-	102, VS-203-W25-101	1	
W25	T-203-W25-117, BE-203-W25-111, CV-203-W25-134, CV-203-W25-112,	*	
	H-203-W25-136		
	HT-203-W25-106HZ		1^{st}

^{*}This emission point can meet the de minimis value without a control device.

3. The potential uncontrolled NO_X emissions are below the applicable emission standard of 300 ppmv; therefore, no monitoring, record keeping, and reporting is required.

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 203-W26: Small Quantities Manufacturing; Mixing, steam drier, ball wheel, tabletting machine and extruder

203-W26 Applicable Regulations

Federally Enforceable Regulations						
Regulation	Regulation Title Applicable Sections					
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3				
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5				

District Only Enforceable Regulations						
Regulation	Regulation Title Applicable Sections					
<u>5.00</u>	Definitions	1 through 2				
<u>5.01</u>	General Provisions	1 through 4				
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5				
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6				

203-W26 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
T-203-W26-001	Acid Tank, 10 gallon	2001	7.25	NA	Fugitive
T-203-W26-002	Acid Tank, 10 gallon	2001	7.25	NA	Fugitive
FR-203-W26-001	Filter Receiver (99.343%)	2001	7.08, 5.21	FIL-203- W26-001	S-203-W26- 002
MX-203-W26-001	Eirich Mixer	2001	7.08, 5.21	DC-203- W26-001	S-203-W26- 001
DR-203-W26-001	Thermal Screw	2001	7.08	NA	Fugitive
VS-203-W26-001	Vibrating Screen	2001	7.08		
PD-203-W26-001	Screen Product Drum	2001	7.08	DC-203-	S-203-W26-
MX-203-W26-003	Ball Wheel	2001	7.08	W26-001	001
MX-203-W26-004	Impregnator	2012	7.08		
EXR-203-W26-001	Extruder	2001	5.21	V-203-W26-	S-203-W26-
TR-203-W26-001	Tray Rack	2001	3.21	001	001

203-W26 Control Devices

Control ID	Description	Stack ID
DC-203-W26-001	Fabric Filter (99.786%), Donaldson, Model Torit DFT 3-12, Downflo	S-203-W26-001
FIL-203-W26-001	HEPA Filter (95%), Vac-U-Max, Model 36955	S-203-W26-002
V-203-W26-001	Packed Scrubber Tower, Bionic, Model #500	S-203-W26-001

203-W26 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
EP MX-203-W26-001, DR-203-W26-001, VS-203-W26-001, PD-203-W26-001, MX-203-W26-003, and MX-203-W26-004	2.34 each
FR-203-W26-001	3.59

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b.

c. VOC

- i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3)
- ii. See Source-Wide Conditions S1.a.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 2.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the

following records:

- 1) The duration of the control device downtime:
- 2) The process throughput during the control device downtime;
- The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

See Source-Wide Conditions S2.c.

c. VOC

See Source-Wide Conditions S2.a.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-203-W26-001, FIL-203-W26-001 and V-203-W26-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-203-W26-001, FIL-203-W26-001	1.0 - 7.0
V-203-W26-001	5.0 - 20.0

iii. For any period of operating outside the established pressure drop range for DC-203-W26-001, FIL-203-W26-001, and/or V-203-W26-001, the owner or operator shall maintain the following records:

- 1) The date,
- 2) The observed pressure drop,
- 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop range for V-203-W26-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

See Source-Wide Conditions S3.b.

c. VOC

See Source-Wide Conditions S3.a.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

203-W26 Comments

1. From EP FR-203-W26-001, MX-203-W26-001, MX-203-W26-003 and MX-203-W26-004, the potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device. From EP DR-203-W26-001, VS-203-W26-001, and PD-203-W26-001, the potential uncontrolled hourly PM emissions meet the applicable emission standards in Regulation 7.08.

- 3. The potential uncontrolled TAC emissions of ammonia from EP MX-203-W26-001, TR-203-W26-001, EXR-203-W26-001 are below the de minimis levels in Regulations 5.00 and 5.21.
- 4. There are no emissions from the Ball Wheel Product Drum, which processes wet material.

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EU 204-W28, 204-W29, 204-W30 and 204-W42: Box Dryers and Sergeant Dryer System

EU 204-W28, 204-W29 and 204-W30:

Box Dryer 1 through 3; Drying of formed catalysts and metal oxides

EU 204-W42: Sergeant Dryer System; Heat treating of formed catalysts

EU 204-W28, 204-W29, 204-W30 and 204-W42 Applicable Regulations

Federally Enforceable Regulations					
Regulation	Regulation Title				
<u>6.24</u>	Standards of Performance for Existing Sources Using Organic Materials	1, 2, 3, 4, 5, and 7			
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5			
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			
<u>7.09</u>	Standards of Performance for New Process Gas Streams	1, 2, and 4			
40 CFR 63 Subpart VVVVVV	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	See <u>Source-Wide</u> <u>Specific Conditions</u>			

District Only Enforceable Regulations					
Regulation	Regulation Title Applicable Sections				
<u>5.00</u>	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

EU 204-W28, 204-W29, 204-W30 and 204-W42 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
204- W28	HT-204-W28-001	Box Dryer 1, 2.0 MMBtu/hr	1967	6.24, 5.21	NA	S-204- W28-001
204- W29	HT-204-W29-001	Box Dryer 2, 2.0 MMBtu/hr	1993	7.25, 5.21	ED-204-W42-010	S-204- W42-001
204- W30	HT-204-W30-001	Box Dryer 3, 1.0 MMBtu/hr	1996	7.25	Fugitive	Fugitive
204- W42	T-204-W42-001	Potassium Carbonate Tank, 50 gal	1980	7.08, 5.21	Fugitive	Fugitive
	H-204-W42-001 PD-204-W42-001	Feed Hopper Product Drumming	1980	7.08, 5.21, 40 CFR 63 VVVVVV	DC-204-W42-001 FIL-204-W42-001	S-204- W42-003
	HT-204-W42-001	Electric Belt Calciner	1980	7.08, 7.09, 5.21, 40 CFR 63 VVVVVV	ED-204-W42-010	S-204- W42-001

EU 204-W28, 204-W29, 204-W30 and 204-W42 Control Devices

Control ID	Description	Stack ID
ED-204-W42-010	Eductor with BMF Mist Eliminator (95%), SCI, Model 12"	S-204-W42-001
DC-204-W42-001	Baghouse (99.786%), Torit, Model DFT 2-8	S-204-W42-003
FIL-204-W42-001	HEPA Filter (99.97%), Donaldson Torit, Model Ultralok	S-204-W42-003

204-W28, 204-W29, 204-W30, and 204-W42 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

- i. For EP HT-204-W28-001, the owner or operator shall not allow or cause the VOC emissions to exceed 450 lb/hr and 3,000 lb/day. (Regulation 6.24, section 3) (See Comment 1.)
- ii. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3)
- iii. See Source-Wide Conditions S1.a.

b. $PM/PM_{10}/PM_{2.5}$

- i. For EP T-204-W42-001, H-204-W42-001, PD-204-W42-001, and HT-204-W42-001, the owner or operator shall not allow or cause PM emissions to exceed 2.34 lb/hr from each emission point. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

c. **Opacity**

See Source-Wide Conditions S1.b.

d. HAP

See Source-Wide Conditions S1.c.

$e. SO_2$

The owner or operator shall not allow or cause the emissions of SO₂ to exceed 28.63 grains per 100 dscf at 0% excess oxygen from EP HT-204-W42-001. (Regulation 7.09, section 4) (See Comment 5.)

f. TAC

See Source-Wide Conditions S1.d. (See Comment 2.)

g. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

See Source-Wide Conditions S2.a.

b. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

c. Opacity

See Source-Wide Conditions S2.c.

d. HAP

See Source-Wide Conditions S2.e.

 $e. SO_2$

There are no monitoring or recordkeeping requirements for SO₂ for this EU.

f. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

g. Control Device Operation

 The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of ED-204-W42-010, DC-204-W42-001 and FIL-204-W42-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as

needed. The owner or operator shall maintain monthly records of the results.

- ii. The owner or operator shall monitor and record the pressure drop across DC-204-W42-001 and FIL-204-W42-001 at least once during each operating day to ensure it is maintained between 2.0 and 7.5 " w.c. for each control device.
- iii. For ED-204-W42-010, the owner or operator shall monitor and record the water makeup pressure at least once during each operating day to ensure it is greater than or equal to 25 psi.
- iv. For ED-204-W42-010, the owner or operator shall monitor and record the inlet water flow rate at least once during each operating day to ensure it is greater than or equal to 10 gpm.
- v. For any period of operating outside the established performance indicator range for ED-204-W42-010, DC-204-W42-001 and/or FIL-204-W42-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- vi. Upon notification to the District, the owner or operator may modify the performance indicator ranges for ED-204-W42-010, DC-204-W42-001 and/or FIL-204-W42-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device
- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. **VOC**

See Source-Wide Conditions S3.a.

b. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.b.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

c. **Opacity**

See Source-Wide Conditions S3.b.

d. HAP

See Source-Wide Conditions S3.c.

$e. SO_2$

There are no compliance reporting requirements for SO₂ for this Emission Unit.

f. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.f.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

g. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.g.v. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

204-W28, 204-W29, 204-W30, and 204-W42 Comments

- 1. The potential uncontrolled hourly PM emissions meet the applicable emission standard in Regulation 7.08.
- 2. The uncontrolled TAC emissions of HCl from EP HT-204-W28-001 and HT-204-W29-001 meet the de minimis levels in Regulation 5.20.
- 3. There are no PM emissions from EP HT-204-W28-001 (Box Dryer #1) and HT-204-W29-001 (Box Dryer #2) due to low air velocity across the trays.
- 4. Except where a tier 1 or 2 analysis is noted, the potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	EP	Co	Cu	Ni	NH_3
204	H-204-W42-001	Tier 1	1^{st}	1^{st}	
204- W42	HT-204-W42-001		Tier 3	Tier 3	*
VV 42	PD-204-W42-001		1 st	1^{st}	

^{*}This emission point can meet the de minimis value without a control device.

From EP HT-204-W42-001, the potential controlled TAC emissions of copper and nickel are above the averaging period de minimis levels. Therefore, the source performed a tier 3 analysis, resulting in the following hazard quotients.

EU	EP	TAC	Location	Risk	Status	HQ	Status
204-	HT-204-W42-001	Cu	unadjusted			0.767	≤ 1.0

[&]quot;--" This emission point has no emissions of the specified TAC.

W42	(Stack S-204-W42-001)	Ni	unadjusted	1.00	≤ 1.0	
		INI	industrial	1.38	≤ 10.0	 -

- 5. The potential TAC emissions of cobalt are above the de minimis levels in Regulations 5.00 and 5.21 for EP H-204-W42-001, HT-204-W42-001, and PD-204-W42-001. The source performed a tier 1 analysis, resulting in a risk greater than the EA goals. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 for EU 204-W37, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.
- 6. The potential uncontrolled SO₂ emissions meet the standard of 28.63 gr/100 ft³ specified in Regulation 7.09, section 4.

EU 204-W32 and 204-W39: C28 Manufacturing; Mixing, forming, drying, and fine grinding of metal oxide catalysts

EU 204-W32: C28 Manufacturing; mixing, forming, and drying of metal oxide catalysts EU 204-W39: Nickel Oxide Grinding; Fine grinding of metal oxides and catalysts rework

204-W32 and 204-W39 Applicable Regulations

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3		
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5		
40 CFR 63 Subpart VVVVVV	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	See <u>Source-Wide</u> Specific Conditions		

	District Only Enforceable Regulations				
Regulation	Title	Applicable Sections			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

204-W32 and 204-W39 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
204- W32	T-204-W32-001	Acetic Acid Tank	1995	7.25	NA	Fugitive
	FR-204-W31-402	Batch Weigh Hopper Filter Receiver (99.489%)	1995	7.08, 5.21, 40 CFR 63 VVVVVV	FIL-204-W32-402 FIL-204-W32- 401A	S-204- W32-003
	FR-204-W32-001	Filter Receiver (99.343%)	1995	7.08		
	T-204-W32-002	Gel Tank	1995	7.08, 7.25		
	DR-204-W32-001	Belt Dryer, 6.3 MMBtu/hr	1995	7.08, 7.25, 5.21, 40		
		WIWIDtu/III		CFR 63 VVVVVV		
	MX-204-W32-001	Eirich Mixer	1995			
	PD-204-W32-001	Product Drum	1995	1	DC-204-W32-407	S-204-
	H-204-W32-001	Hopper	2007	1	FIL-204-W32-407	W32-002
	VS-204-W32-001	Screener	2007	7.00 5.01		
	DR-204-W32-408	Belt Dryer	2007	7.08, 5.21, 40 CFR 63		
	VS-204-W32-409	Screener	2007	VVVVVV		
	H-204-W32-409	Hopper	2007	V V V V V		
	H-204-W32-405	Hopper	2007			
	H-204-W32-408	Feed Hopper	2007			
	MX-204-W32-404	Eirich Mixer	2007			
	H-204-W32-400	Bag Dump	2000	7.08	BV-204-W32-400	S-204-

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
		Station Hopper				W32-001
204- W39	FR-204-W39-415 from FD-204-W39-411/M- 204-W39-413	Filter Receiver, venting Screw Feeder and Fine Grinder	2000, 2008, 2008	7.08, 5.21, 40 CFR 63 VVVVVV	FIL-204-W39-415 FIL-204-W39- 415A	S-204- W39-001
	DD-204-W39-410/ H- 204-W39-410	Drum Dumper/ Feed Hopper	2000			
	M-204-W39-412/ H-204-W39-411	Crusher /Feed Hopper	2000	7.08, 5.21,	BV-204-W39-417	G 204
	PD-204-W39-001	Product Drum for M-412	2000		DC-204-W32-407 FIL-204-W32-407	S-204- W39-002
	H-204-W39-416	Hopper	2000			
	PD-204-W39-002	Product Drum for H-416	2000			
	H-204-W39-417	Hopper	2000	7.08, 5.21, 40 CFR 63 VVVVVV	DC-204-W32-407 FIL-204-W32-407	S-204- W39-002

204-W32 and 204-W39 Control Devices

EU	Control ID	Description	Stack ID
204-W32	DC-204-W32-407	Baghouse (99.489%)	S-204-W32-002
and 204- W39	FIL-204-W32-407	HEPA Filter (99.97%)	S-204-W32-002
204-W32	BV-204-W32-400	Bag Dump Bin Vent (99.489%), MAC Equipment, Inc. Model 2MTF2	S-204-W32-001
	FIL-204-W32-401A	HEPA Filter (99.97%)	S-204-W32-003
	FIL-204-W32-402	HEPA Filter (99.97%)	S-204-W32-003
204-W39	BV-204-W39-417	Bin Vent Filter (99.489%), Mac Equip, Model 39FRTC4	S-204-W39-002
	FIL-204-W39-415	HEPA Filter (99.97%), Solberg, Model 275P	S-204-W39-001
	FIL-204-W39-415A	HEPA Filter (99.97%)	S-204-W39-001

204-W32 and 204-W39 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EU	EP	Emission Limit (lb/hr)
204-	T-204-W32-002, FR-204-W32-001, MX-204-W32-001,	2.34, each
W32	DR-204-W32-001, PD-204-W32-001, H-204-W32-001,	
	VS-204-W32-001, H-204-W32-400 DR-204-W32-408, VS-	
	204-W32-409, H-204-W32-408, MX-204-W32-404	
	H-204-W32-409, H-204-W32-405	3.00, each
	FR-204-W31-402	4.62
	H-204-W31-401	3.59
204-	FR-204-W39-415 from FD-204-W39-411/M-204-W39-	2.34, each
W39	413, DD-204-W39-410/ H-204-W39-410, M-204-W39-	
	412/H-204-W39-411, PD-204-W39-001, H-204-W39-416,	
	PD-204-W39-002, H-204-W39-417	

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b (See Comment 2.)

c. VOC

- i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3) (See Comment 3.)
- ii. See Source-Wide Conditions S1.a.

d. HAP

See Source-Wide Conditions S1.c.

e. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 4.)

f. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. VOC

See Source-Wide Conditions S2.a.

d. HAP

See Source-Wide Conditions S2.e.

- e. TAC
 - i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
 - ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of BV-204-W39-400, BV-204-W32-401, BV-204-W39-417, DC-204-W32-407, FIL-204-W32-402, FIL-204-W32-402A, FIL-204-W32-407, FIL-204-W32-402A, FIL-204-W39-415 and FIL-204-W39-415A for signs of damage, air leakage, corrosion, or

other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
BV-204-W39-400	1.0 – 10.0
BV-204-W32-401, BV-204-W39-417	1.0 - 5.5
DC-204-W32-407	1.5 – 10.0
FIL-204-W32-402	1.5 - 6.5
FR-204-W32-001	1.0 - 4.0
FIL-204-W32-402A, FIL-204-W32-407	0.1 - 5.0
FIL-204-W39-415,	1.0 - 25.0
FIL-204-W39-415A	1.0 - 40.0

- iii. For any period of operating outside the established pressure drop range for BV-204-W39-400, BV-204-W32-401, BV-204-W39-417, DC-204-W32-407, FIL-204-W32-402A, FIL-204-W32-402A, FIL-204-W39-415, and/or FIL-204-W39-415A, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop ranges for BV-204-W39-400, BV-204-W32-401, BV-204-W39-417, DC-204-W32-407, FIL-204-W32-402, FIL-204-W32-402A, FIL-204-W32-407, FIL-204-W39-415, and/or FIL-204-W39-415A once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. VOC

See Source-Wide Conditions S3.a.

d. HAP

See Source-Wide Conditions S3.c.

e. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

f. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

204-W32 and 204-W39 Comments

- 1. From EP T-204-W32-002, FR-204-W32-001, FR-204-W31-402, MX-204-W32-001 and H-204-W31-401, DD-204-W39-410/H-204-W39-410, M-204-W39-412/H-204-W39-411, DD-204-W39-400, H-204-W32-409, H-204-W32-405 and MX-204-W32-404, the potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device. From EP DR-204-W32-001, PD-204-W32-001, H-204-W32-001, VS-204-W32-001, PD-204-W39-001 and -002, H-204-W39-416 and -417, FR-204-W39-415, DR-204-W32-408, VS-204-W32-409 and H-204-W32-408, the potential uncontrolled hourly PM emissions meet the emission standard in Regulation 7.08.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential uncontrolled VOC emissions are 0.0028 tpy from each EP T-204-W32-001 and T-204-W32-002 and 22.90 tpy from EP DR-204-W32-001.

4. The potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	Emission Point	Cu	Ni
204-	MX-204-W32-001, H-204-W32-409, H-204-W32-405, MX-204-W32-404	2^{nd}	2^{nd}
W/32	FR-204-W32-402, DR-204-W32-001, PD-204-W32-001, H-204-W32-001, VS-204-W32-001, DR-204-W32-408, VS-204-W32-409, H-204-W32-408	1 st	2 nd
W 32	204-W32-001, DR-204-W32-408, VS-204-W32-409, H-204-W32-408	1	
204	DD-204-W39-410/H-204-W39-410, M-204-W39-412/H-204-W39-411, FR-204-	2nd	2 nd
W39	W39-415, DD-204-W39-400	2	2
** 33	PD-204-W39-001, PD-204-W39-002, H-204-W39-416	1^{st}	2^{nd}

EU 204-W34 and 204-W38:

EU 204-W34: Mixing and extrusion of catalyst ingredients

EU 204-W38: Granulator System; Granulation of catalyst ingredients

204-W34 and 204-W38 Applicable Regulations

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
6.09	Standards of Performance for Existing Process Operations	1 through 3		
<u>6.24</u>	Standards of Performance for Existing Sources Using Organic Materials	1, 2, 3, 4, 5, and 7		
40 CFR 63 Subpart VVVVVV	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	See <u>Source-Wide</u> <u>Specific Conditions</u>		

District Only Enforceable Regulations				
Regulation	Title	Applicable Sections		
<u>5.00</u>	Definitions	1 through 2		
<u>5.01</u>	General Provisions	1 through 4		
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3		
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5		
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6		

204-W34 and 204-W38 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
204-	T-204-W34-001	Acid Tank, 300 gal		6.24, 5.21	NA	Fugitive
W34	T-204-W34-002	Acid Batch Tank, 50 gal		6.24, 5.21	NA	Fugitive
	DD-204-W34-001	Drum Dumper		6.00 5.21 40	DC-204-	
	H-204-W34-001	Bag Dump Hopper		6.09, 5.21, 40 CFR 63	W34-001	S-204-W34-
	MX-204-W34-001	Simpson Mix		VVVVVV	FIL-204-	001
		Muller	1970		W34-001	
204-	H-204-W38-002	Hopper	1970			
W38	DD-204-W38-002	Drum Dumper			DC 204	
	FD-204-W38-001	Feeder		6.09, 5.21, 40 CFR 63 VVVVVV	DC-204- W34-001	S-204-W34-
	M-204-W38-001	Granulator			W 34-001 FIL-204-	001
	VS-204-W38-001	Screener			VVVVV W34-001	001
	PD-204-W38-001/	Product			W 34-001	
	PD-204-W38-002	Drumming				

204-W34 and 204-W38 Control Devices

Control ID	Description	Stack ID
DC-204-W34-001	Fabric Filter (99.343%), Mikropul, Model 36-8	S-204-W34-001
FIL-204-W34-001	HEPA filter (99.97%), Donaldson Torit, Model Ultra Lok 1x1	S-204-W34-001

204-W34 and 204-W38 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 6.09, section 3.2) (See Comments 1 and 2.)

EU	EP	Emission Limit (lb/hr)
204-	H-204-W34-001, DD-204-W34-001, and MX-204-W34-	4.10 each
W34	001	
204-	H-204-W38-002, DD-204-W38-002, FD-204-W38-001,	2.58 each
W38	M-204-W38-001, VS-204-W38-001, and PD-204-W38-	
	001/PD-204-W38-002	

ii. See <u>Source-Wide Conditions S1.a.</u>

b. **Opacity**

See <u>Source-Wide Conditions S1.b.</u> (See Comment 3.)

c. VOC

For EP T-204-W34-001 and T-204-W34-002, the owner or operator shall not allow or cause the VOC emissions to exceed 450 lb/hr and 3,000 lb/day. (Regulation 6.24, section 3.3) (See Comment 4.)

d. HAP

See Source-Wide Conditions S1.c.

e. TAC

See Source-Wide Conditions S1.d. (See Comment 5.)

f. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and DC-204-W34-001 and/or FIL-204-W34-001 was not operating, the owner or operator shall maintain the following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. VOC

There are no compliance monitoring or record keeping requirements for VOC for this Emission Unit. (See Comment 4.)

d. HAP

See Source-Wide Conditions S2.e.

e. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-204-W34-001 and FIL-204-W34-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the

operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-204-W34-001	1.0 - 6.0
FIL-204-W34-001	0.2 - 5.0

- iii. For any period of operating outside the established pressure drop range for DC-204-W34-001 and/or FIL-204-W34-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop range for DC-204-W34-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.
- S3. **Reporting** (Regulation 2.16, section 4.1.1)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. VOC

There are no compliance reporting requirements for VOC for this Emission Unit.

d. HAP

See Source-Wide Conditions S3.c.

e. TAC

i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in

S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.d.

f. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

204-W34 and 204-W38 Comments

- 1. From EU 204-W34, the potential controlled hourly PM emissions meet the emission standard in Regulation 6.09 after the first control device.
- 2. From EU 204-W38, the potential uncontrolled PM emissions from EU VS-204-W38-001, PD-204-W38-001, H-204-W38-002, FD-204-W38-001 and DD-204-W38-002 meet the emission standard in Regulation 6.09. The potential controlled PM emissions for M-204-W38-001 meet the emission standard in Regulation 6.09 after the first control device.
- 3. From EU 204-W34, the potential uncontrolled acetic acid emissions are below the applicable VOC emission standards in Regulations 6.24. The potential uncontrolled acetic acid emissions are 0.00454 tons per year.
- 4. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 5. From EU 204-W34, the potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EU	EP	Cr(III)	Cu	Ni	HNO ₃
204-	T-204-W34-001, T-204-W34-002			-	*
W34	MX-204-W34-001, DD-204-W34-001	2 nd	2 nd	2^{nd}	
W 34	H-204-W34-001	2 nd			
	H-204-W38-002, DD-204-W38-002,		1 st	2^{nd}	
204-	VS-204-W38-001, PD-204-W38-001/				
W38	PD-204-W38-002				
W 38	FD-204-W38-001		1 st	1 st	
	M-204-W38-001		2 nd	2^{nd}	

^{*}This emission point can meet the de minimis value without a control device.

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 204-W35: Dipping System; Impregnation of catalyst carriers with various metal ions by spraying with metal salt solutions

204-W35 Applicable Regulations

Federally Enforceable Regulations				
Regulation Title Applicable Sections				
<u>6.09</u>	Standards of Performance for Existing Process Operations	1 through 3		
40 CFR 63 Subpart	National Emission Standards for Hazardous Air Pollutants	See Source-Wide		
VVVVV	for Chemical Manufacturing Area Sources	Specific Conditions		

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
<u>5.00</u>	Definitions	1 through 2	
<u>5.01</u>	General Provisions	1 through 4	
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3	
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5	
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6	

204-W35 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
T-204-W35-004	Metal Nitrates Tank (H ₂ SO ₄), 500 gal	1967	5.21	NA	S-204-W35- 003
T-204-W35-011	Blow Tank (H ₂ SO ₄)	1967	5.21	NA	Fugitive
MX-204-W35- 001	Rotary Impregnator	1967	6.09, 5.21, 40 CFR 63 VVVVVV	DC-204- W35-001	S-204-W35- 004

204-W35 Control Devices

Control ID	Description	Stack ID
DC-204-W35-001	Fabric Filter (99.786%), Donaldson, Model Torit 2DF-4 Downflo	S-204-W35-004

204-W35 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

- a. PM/PM_{10}
 - i. The owner or operator shall not allow or cause PM emissions to exceed 4.30 lb/hr from EP MX-204-W35-001. (Regulation 6.09, section 3.2) (See Comment 1.)
 - ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b.. (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 3.)

e. Control Device Operation

The owner or operator shall operate and maintain DC-204-W35-001 at all times an associated emission point is in operation. (Regulations 2.04, 2.05, 5.00, 5.21, 7.08 section 3.1.2 and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and DC-204-W35-001 was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-204-W35-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop across DC-204-W35-001 at least once during each operating day to ensure it is maintained between 1.0 and 6.5 " w.c.
- iii. For any period of operating outside the established pressure drop range for DC-204-W35-001, the owner or operator shall maintain the following records:
 - 1) The date.
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop range for DC-204-W35-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.d.</u>

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

204-W35 Comments

- 1. The potential uncontrolled hourly PM emissions meet the applicable emission standard in Regulation 7.08.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. Except where a tier 1 analysis is noted, the potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	EP	Cr(VI)	Co	Ni	H ₂ SO ₄
	T-204-W35-004 and T-204-W35-				
204-	011				*
W35	MX-204-W35-001		Tier 1, See		
		1^{st}	Comment 4.	1^{st}	*

^{*}This emission point can meet the de minimis value without a control device.

[&]quot;--" This emission point has no emissions of the specified TAC.

4. For EP MX-204-W35-001, the source performed a tier 1 analysis, resulting in a risk greater than the EA goals. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 for EU 204-W35, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.

EU 204-W36: Small Eirich Mixing System; Mixing of metal oxides with additives prior to extrusion

204-W36 Applicable Regulations

Federally Enforceable Regulations				
Regulation	Applicable Sections			
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3		
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 and 5		
40 CFR 63 Subpart National Emission Standards for Hazardous Air		See Source-Wide Specific		
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Conditions		

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
<u>5.00</u>	Definitions	1 through 2	
<u>5.01</u>	General Provisions	1 through 4	
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3	
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5	
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6	

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
T-204-W36-001	Mix Tank, 25 gal	1999	7.25, 5.21	NA	Fugitive
FR-204-W36-001	Filter Receiver (99.343%)	1999	7.08, 5.21, 40 CFR 63	FIL-204-W36-001	S-204-W36- 001
MX-204-W36-001	Eirich Mixer	1999	VVVVVV	DC-204-W36-001 FIL-204-W36-002	S-204-W36- 002

204-W36 Control Devices

Control ID	Description	Stack ID
FIL-204-W36-001	HEPA filter (99.97%), Vac-U-Max, Model 22483	S-204-W36-001
DC-204-W36-001	Fabric Filter (99.343%), Consolidated Engineering, Model P8	S-204-W36-002
FIL-204-W36-002	HEPA filter (99.97%), Donaldson Torit Model Ultra Lok 1x1	S-204-W36-002

204-W36 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

PM/PM₁₀/PM_{2.5} a.

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
FR-204-W36-001	3.59
MX-204-W36-001	2.34

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

HAP c.

See Source-Wide Conditions S1.c.

d. **TAC**

See Source-Wide Conditions S1.d. (See Comment 3.)

- **VOC** e.
 - i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3)
 - ii. See Source-Wide Conditions S1.a.

f. **Control Device Operation**

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

$PM/PM_{10}/PM_{2.5}$ a.

i. For any period of time when the process was operating and DC-204-W36-001, FIL-204-W36-001 and/or FIL-204-W36-002 was not operating, the

owner or operator shall maintain the following records:

- 1) The duration of the control device downtime:
- 2) The process throughput during the control device downtime;
- The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. **VOC**

See Source-Wide Conditions S2.a.

d. HAP

See Source-Wide Conditions S2.e.

e. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of FIL-204-W36-001, DC-204-W36-001 and FIL-204-W36-002 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-204-W36-001	0.5 - 10.0
FIL-204-W36-001, FIL-204-W36-002	0.2 - 5.0

iii. For any period of operating outside the established pressure drop range for FIL-204-W36-001, DC-204-W36-001 and/or FIL-204-W36-002, the owner or operator shall maintain the following records:

- 1) The date,
- 2) The observed pressure drop,
- 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop ranges for DC-204-W36-001 and/or FIL-204-W36-001, once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. **VOC**

See Source-Wide Conditions S3.a.

d. HAP

See Source-Wide Conditions S3.c.

e. TAC

KMT

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.d.</u>

f. Control Device Operation

Identification of all periods of operating outside the established performance 142 of 218 7/30/2014

indicator range for a control device, including the information recorded in S2.f.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

204-W36 Comments

- 1. The potential controlled PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. Except where a tier 1 analysis is noted, the potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	EP	Co	Cr(III)	Ni	HNO ₃
204	MX-204-W36-001	Tier 1, See	1 st	2^{nd}	
204- W36	FR-204-W36-001	Comment 4.		1 st	
W 30	T-204-W36-001				*

^{*}This emission point can meet the de minimis value without a control device.

- 4. For EP FR-204-W36-001 and T-204-W36-001, the source performed a tier 1 analysis, resulting in a risk greater than the EA goals. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 for EU 204-W36, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.
- 5. The potential uncontrolled acetic acid emissions are 0.000022 tons per year.

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 204-W37: Extruder/Belt Dryer System; Extrusion and drying of wet metal oxides

204-W37 Applicable Regulations

Federally Enforceable Regulations						
Regulation	Regulation Title Applicable Sections					
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3				
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1, 2, 3, 4 and 5				

District Only Enforceable Regulations					
Regulation	Regulation Title Applicable Sections				
5.00	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

204-W37 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
CV-204-W37-001- 004	4 Belt Conveyors	1998	7.08, 5.21	NA	Fugitive
BU-204-W37-001	Belt Dryer Burner, 0.50 MMBtu/hr	1998	7.08, 5.21	NA	Fugitive
PD-204-W37-001	Product Drum	1998	7.08, 5.21	NA	Fugitive
HT-204-W37-001	Belt Dryer	1998	7.08, 7.25	NA	S-204-W37- 001

There are no control devices associated with Emission Unit 204-W37.

204-W37 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

- i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3)
- ii. See Source-Wide Conditions S1.a.

b. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause PM emissions to exceed 2.34 lb/hr from EP CV-204-W37-001, CV-204-W37-002, CV-204-W37-003, CV-204-W37-004, PD-204-W37-001, and HT-204-W37-001. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.
- c. **Opacity**

See Source-Wide Conditions S1.b.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 2.)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

See Source-Wide Conditions S2.a.

b. $PM/PM_{10}/PM_{2.5}$

See Source-Wide Conditions S2.b.

c. **Opacity**

See Source-Wide Conditions S2.c.

d. TAC

See Source-Wide Conditions S2.f.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with KMT 145 of 218 7/30/2014

General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$ and VOC

See Source-Wide Conditions S3.a.

b. **Opacity**

See Source-Wide Conditions S3.b.

c. TAC

See Source-Wide Conditions S3.d.

204-W37 Comments

- 1. The potential uncontrolled PM emissions meet the applicable emission standards in Regulation 7.08.
- 2. The potential uncontrolled acetic acid emissions are 0.40 tons per year.
- 3. The potential TAC emissions of nitric acid from EP CV-204-W37-001 004 and PD-204-W37-001 are below the de minimis levels in Regulations 5.00 and 5.21.
- 4. Clariant reported in their Third Quarter 2011 STAR Compliance Plan that an internal emissions test of HT-204-W37-001 showed no detectable nitric acid emissions.
- 5. There are no emissions from EP H-204-W37-001 (Feed Hopper) and EXR-204-W37-001 (Extruder), which process wet material.
- 6. The potential TAC emissions of cobalt are above the de minimis levels in Regulations 5.00 and 5.21 for EP CV-204-W37-001-004, PD-204-W37-001, and HT-204-W37-001. The source performed a tier 1 analysis, resulting in a risk greater than the EA goals. Pursuant to Regulation 5.21, Section 6.9, Clariant shall demonstrate compliance with the EA goals for cobalt by December 4, 2016 for EU 204-W37, 36 months after notification by the District that the BAC for cobalt became more stringent. Clariant submitted an updated EA demonstration on June 4, 2014 and will submit a compliance plan by June 4, 2015.

EU 204-W40: Pulvacron System; Fine grinding of catalyst rework and metal oxides

204-W40 Applicable Regulations

Federally Enforceable Regulations				
Regulation Title Applicable Sections				
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3		
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide Specific		
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Conditions		

	District Only Enforceable Regulations				
Regulation	Title	Applicable Sections			
<u>5.00</u>	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

204-W40 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
H-204-W40-001	Feed Hopper				
DD-204-W40-001	Drum dumper		7.08, 5.21,		
PD-204-W40-001	Rework Drum (Cylcone Product Drum)	1976	40 CFR 63 VVVVVV	DC-204-W40-001 FIL-204-W40-001	S-204- W40-001
PD-204-W40-002	Rework Drum (Dust Collector Product Drum)		V V V V V		
M-204-W40-001	Pre-Grinder	1976	7.08, 5.21, 40 CFR 63 VVVVVV	SEP-204-W40-001 DC-204-W40-001 FIL-204-W40-001	S-204- W40-001

204-W40 Control Devices

Control ID	Description	Stack ID
DC-204-W40-001	Fabric Filter (99.343%), MikroPul, Model 21-6-100	S-204-W40-001
FIL-204-W40-001	HEPA (99.97%), Donaldson Torit, Model Ultra Lok 1x1	S-204-W40-001
SEP-204-W40-001	Cyclone Separator (95%), 1976	S-204-W40-001

204-W40 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause the PM emissions to exceed 2.34 lb/hr from EP H-204-W40-001, DD-204-W40-001, M-204-W40-001, PD-204-W40-001 and PD-204-W40-002. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See <u>Source-Wide Conditions S1.a.</u>

b. **Opacity**

See <u>Source-Wide Conditions S1.b.</u> (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 3.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See <u>Source-Wide Conditions S2.b.</u>

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-204-W40-001, FIL-204-W40-001 and SEP-204-W40-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-204-W40-001	0.5 - 10.0
FIL-204-W40-001	0.2 - 5.0

- iii. For any period of operating outside the established pressure drop range for DC-204-W40-001 and/or FIL-204-W40-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop range for DC-204-W40-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating

trends that necessitated a change shall be kept for the life of the control device

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.d.</u>

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

204-W40 Comments

- 1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21. The control devices needed are listed in the table below.

EP	Cu	Ni	Mn
DD-204-W40-001, H-204-W40-001, PD-204-W40-001, PD-204-W40-002	2 nd	2 nd	2^{nd}
M-204-W40-001	$3^{\rm rd}$	$3^{\rm rd}$	$3^{\rm rd}$

EU 204-W43: Wyssmont Drying System; Extrusion and drying of wet catalyst ingredients which have been mixed in the 204-W34 System

204-W43 Applicable Regulations

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
<u>6.09</u>	Standards of Performance for Existing Process Operations	1 through 5		
<u>7.25</u>	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5		

	District Only Enforceable Regulations	
Regulation	Title	Applicable Sections
NA	NA	NA

204-W43 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
HT-204-W43-001	Wyssmont Dryer	1973	6.09, 7.25	SEP-204- W43-001	S-204-W43-001
PD-204-W43-001	Product Drumming	1973	6.09	Fugitive	Fugitive

204-W43 Control Devices

Control ID	Description	Stack ID
SEP-204-W43-001	Cyclone Separator (75% PM), Donaldson Torit, Model 24 FM 55, 1988	S-204-W43-001

204-W43 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. PM/PM_{10}

- i. The owner or operator shall not allow or cause PM emissions to exceed 4.10 lb/hr from EP HT-204-W43-001 and PD-204-W43-001. (Regulation 6.09, section 3.3.1) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b.

c. **VOC**

- i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3)
- ii. See Source-Wide Conditions S1.a.

d. NO_X

- i. For EP HT-204-W43-001, the owner or operator shall not allow or cause the emission of NO_X to exceed 300 ppmv, expressed as NO_2 . (Regulation 6.09, section 4.1) (See Comment 2.)
- ii. See <u>Source-Wide Conditions S1.a.</u>

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, and 6.09 section 3.3.1)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and SEP-204-W43-001 was not operating, the owner or operator shall maintain the following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

See Source-Wide Conditions S2.c.

c. VOC

See Source-Wide Conditions S2.a.

d. NO_X

See Source-Wide Conditions S2.d.

e. Control device

The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of SEP-204-W43-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

See Source-Wide Conditions S3.b.

c. VOC

See Source-Wide Conditions S3.a.

d. NO_X

See Source-Wide Conditions S3.a.

e. Control device

There are no reporting requirements for the control device for EU 204-W43.

204-W43 Comments

- 1. The potential controlled hourly PM emissions from EP HT-204-W43-001 meet the applicable emission standard in Regulation 6.09 after the first control device. The potential uncontrolled hourly PM emissions from EP PD-204-W43-001 meet the applicable emission standard in Regulation 6.09.
- 2. The potential uncontrolled NO_X emissions meet the applicable emission standard in Regulation 7.08.

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EU 204-W58: Product mixing system

204-W58 Applicable Regulations

	Federally Enforceable Regulations		
Regulation	ion Title Applicable Sections		
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3	

	District Only Enforceable Regulations			
Regulation	on Title Applicable Sections			
NA	NA	NA		

204-W58 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID	
DD-204-W58-001	Drum Dumper	2001	7.08	DC-204-W58-001	S 204 W/22 001	
MX-204-W58-002	Sigma Mixer	2001	7.08	DC-204-W 36-001	3-204-W33-001	

204-W58 Control Devices

Control ID	Description	Stack ID
DC-204-W58-001	Fabric Filter (99.343%), MikroPul, Model Type 8B	S-204-W33-001

204-W58 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

- i. The owner or operator shall not allow or cause the PM emissions to exceed 2.34 lb/hr from EP DD-204-W58-001 and MX-204-W58-001. (Regulation 7.08, section 3.1.2) (See Comment 1.)
- ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See <u>Source-Wide Conditions S1.b.</u> (See Comment 2.)

c. Control Device Operation

The owner or operator shall operate and maintain DC-204-W58-001 at all times an associated emission point is in operation. (Regulations 2.04, 2.05, and 7.08 section 3.1.2)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and DC-204-W58-001 was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. Control Device Operation

i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-204-W58-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

ii. The owner or operator shall monitor and record the pressure drop across DC-204-W58-001 at least once during each operating day to ensure it is maintained between 0.1 and 5 inches w.c.

- iii. For any period of operating outside the established pressure drop range for DC-204-W58-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.c.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

204-W58 Comments

- 1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.

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EU 212-W45: C84 North System; Mixing, forming and calcination of catalysts. Phosphoric acid and diatomaceous earth (silicon dioxide) are mixed together, extruded, calcined and screened to form a catalyst

212-W45 Applicable Regulations

Federally Enforceable Regulations					
Regulation	Applicable Sections				
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3			
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5			
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide Specific			
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Conditions			

District Only Enforceable Regulations					
Regulation	Title	Applicable Sections			
<u>5.00</u>	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

212-W45 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
DD-212-W45-001	Drum Dumper	1981	7.08, 5.21, 40 CFR 63 VVVVVV	DC-212-W45-001	S-212-W45-006
T-212-W45-003 T-212-W45-004	Tank Tank	1981	7.25	ED-212-W45-001 BMF-212-W45-001	S-212-W45-007
HT-212-W45-001a	Belt Calciner, 2 MM Btu/hr	1981	7.08, 5.21, 40 CFR 63	DC-212-W45-001	S-212-W45-006
HT-212-W45-001b	Belt Calciner, 2 MM Btu/hr	1901	VVVVVV	ED-212-W45-001 BMF-212-W45-001	S-212-W45-007

212-W45 Control Devices

Control ID	Description	Stack ID
DC-212-W45-001	Fabric Filter (99.343%), MikroPul, Model 64S-8-20-C	S-212-W45-006
ED-212-W45-001	Eductor/Venturi (75%), Schutte & Koerting, Model 7010-14	S-212-W45-007
BMF-212-W45-001	Mist Eliminator (99%), Monsanto, Model 32496 A3-2	S-212-W45-007

212-W45 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

PM/PM₁₀ a.

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
DD-212-W45-001	2.62
HT-212-W45-001a and HT-212-W45-001b	3.59 each

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

VOC c.

- i. For affected facilities subject to Regulation 7.25, the owner or operator shall not allow or cause the *plant-wide* VOC emissions to exceed 5 tons per year, unless modeling or a BACT analysis has been submitted to, and approved by, the District. (Regulation 7.25, section 3)
- ii. See Source-Wide Conditions S1.a.

d. HAP

See Source-Wide Conditions S1.c.

TAC e.

See Source-Wide Conditions S1.d. (See Comment 3.)

f. **Control Device Operation**

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

PM/PM₁₀/PM_{2.5} a.

i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the 160 of 218

following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. VOC

See Source-Wide Conditions S2.a.

d. HAP

See Source-Wide Conditions S2.e.

e. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-212-W45-001, ED-212-W45-001 and BMF-212-W45-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop
DC-212-W45-001	1.0 – 10.0 " w.c.
ED-212-W45-001	90 – 150 psi

Control ID	Pressure Drop
BMF-212-W45-001	2.0 – 12.0 " w.c.

- iii. For any period of operating outside the established pressure drop ranges for DC-212-W45-001, ED-212-W45-001 and/or BMF-212-W45-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed pressure drop,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop range for DC-212-W45-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.
- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. **VOC**

See Source-Wide Conditions S3.a.

d. HAP

See Source-Wide Conditions S3.c.

e. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

f. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

212-W45 Comments

- 1. The potential controlled hourly PM emissions meet the applicable emission standard in Regulation 7.08 after the first control device.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. Except where a tier 3 analysis is noted, the potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	EP	Cr(III)	Cu	Ni
212-	DD-212-W45-001	1 st		
W45	HT-212-W45-001a	1 st	Tier 3	Tier 3
W43	HT-212-W45-001b	2 nd	2^{nd}	2^{nd}

[&]quot;--" This emission point has no emissions of the specified TAC.

From EP HT-212-W45-001b, the potential controlled TAC emissions of copper and nickel are above the averaging period de minimis levels. Therefore, the source performed a tier 3 analysis, resulting in the following hazard quotients.

EU	EP	TAC	Location	Risk	Status	HQ	Status
212-	UT 212 W/45 001b	Cu	unadjusted			0.961	≤ 1.0
W45	HT-212-W45-001b (Stack S-212-W45-006)	Ni	unadjusted	0.44	≤ 1.0	0.033	≤ 1.0
W43		INI	adjusted	1.69	≤ 10.0	0.13	≤ 3.0

4. Screw Conveyor CV-212-C84N-001, Rework Screw Conveyor CV-212-C84N-002, Exotherm Belt Conveyor CV-212-C84N-003, Vibrating Conveyor CV-212-C84N-004, Belt Conveyor CV-212-C84N-005, Extruder EXR-212-C84N-001, Loss in Weight Feeder FD-212-C84N-001, Vibrating Feeder FD-212-C84N-002, Filter Receiver FR-212-C84N-001, Bag Dump Hopper H-212-C84N-001, Diatomaceous Earth Storage Hopper H-212-C84N-002, Rework Hopper H-212-C84N-003, Extruder Feed Hopper H-212-C84N-004, Diatomaceous Earth Dusting Hopper H-212-C84N-005, Belt Calciner Discharge Hopper H-212-C84N-006, Rotary Screener Feed Hopper H-212-C84N-007, Continuous Mixer MX-212-C84N-001, Product Drum PD-212-C84N-001, Fines Drum PD-212-C84N-002, Rotary Screener RS-212-C84N-001, Vibrating Screener VS-212-C84N-001, Hopper H-W45-005 were removed.

EU 212-W47: C84 South System; Mixing, forming and calcination of catalysts. Phosphoric acid and diatomaceous earth (silicon dioxide) are mixed, extruded, calcined and screened to form a catalyst

212-W47 Applicable Regulations

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3		

District Only Enforceable Regulations			
Regulation Title Applicable Sections			
NA	NA	NA	

212-W47 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
H-212-W47-001	Bag Dump Hopper	1988	7.08	BV-212-W47-001	S-212- W47-004
FR-212-W47-001 venting CV-212- W47-001, CV-212- W47-002 and H- 212-W47-002	Filter Receiver, 3000 lb/hr, venting 2 Screw Conveyors, 2000 lb/hr ea., and Diatomaceous Earth Storage Hopper	1988	7.08	FIL-212-W47-001	S-212- W47-005
FD-212-W47-001 MX-212-W47-001 H-212-W47-005 FD-212-W47-002	Loss in Weight Feeder Continuous Mixer Diatomaceous earth dusting hopper Vibrating Feeder	1988	7.08	DC-212-W47-001 FIL-212-W47-003	S-212- W47-007
H-212-W47-004 VS-212-W47-001 DD-212-W47-001 H-212-W47-003	Extruder Feeder Hopper Vibrating Screener Drum Dumper Rework Hopper				
EXR-212-W47-003 CV-212-W47-004 PD-212-W47-001 CV-212-W47-003	Extruder Exotherm Belt Conveyor Fines Drum Rework Screw Conveyor	1988	7.08	DC-212-W47-002 FIL-212-W47-002	S-212- W47-009
HT-212-W47-001	Belt Calciner	1988	7.08	ED-212-W47-001 BMF-212-W47-001	S-212- W47-008
H-212-W47-006 CV-212-W47-005 CV-212-W47-006 H-212-W47-007 RS-212-W47-001 PD-212-W47-002	Belt Calciner Discharge Hopper Vibrating Conveyor Belt Conveyor Rotary Screener Feed Hopper Rotary Screener Fines Drum	1988	7.08	DC-212-W47-002 FIL-212-W47-002	S-212- W47-009
PD-212-W47-002	Product Drums				

212-W47 Control Devices

Control ID	Description	Stack ID
DC-212-W47-001	Main Fabric Filter – East (99.343%), MikroPul, Model 64S-8-20-C, 1988	S-212-W47-007
DC-212-W47-002	Main Fabric Filter – West (99.786%), Torit, 2008	S-212-W47-009
BV-212-W47-001	Cartridge Filter (95%), Delta Conveyor, Model Unknown, 1988	S-212-W47-004
FIL-212-W47-001	Cartridge Filter (95%), 1988	S-212-W47-005
FIL-212-W47-002	West HEPA Filter (99.97%) 2008	S-212-W47-009
FIL-212-W47-003	East HEPA Filter (99.97%), 2008	S-212-W47-007
ED-212-W47-001	Eductor/Venturi (75%), Schutte & Koerting, Model 7010-14, 1988	S-212-W47-008
BMF-212-W47- 001	Mist Eliminator (99%), Monsanto, Model 32496 A3-2, 1988	S-212-W47-008

212-W47 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. PM/PM_{10}

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
H-212-W47-001 and FR-212-W47-001	4.62 each
FD-212-W47-001, PD-212-W47-001, VS-212-W47-001, HT-212-W47-001, H-212-W47-006, CV-212-W47-005, CV-212-W47-006, H-212-W47-007, RS-212-W47-001, PD-212-W47-002, and PD-212-W47-003	
MX-212-W47-001, DD-212-W47-001, H-212-W47-003, CV-212-W47-003, CV-212-W47-004, H-212-W47-004, and EXR-212-W47-001	
H-212-W47-005 and FD-212-W47-002	2.34 each

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b.

c. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air poll(Regulation 2.04, 2.05, and 7.08 section 3.1.2)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

See Source-Wide Conditions S2.c.

c. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-212-W47-001, DC-212-W47-002, BV-212-W47-001, FIL-212-W47-001, FIL-212-W47-002, FIL-212-W47-003, ED-212-W47-001 and BMF-212-W47-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-212-W47-001, FIL-212-W47-001	1.0 - 10.0
BV-212-W47-001	1.0 - 5.0
DC-212-W47-002, FIL-212-W47-002, FIL-212-W47-003	0.05 - 7.0
BMF-212-W47-001	2.0 - 12.0

- iii. For ED-212-W47-001, the owner or operator shall monitor and maintain records of the inlet water flow rate at least once during each operating day to ensure it is greater than or equal to 115 gpm.
- iv. For any period of operating outside the established performance indicator range for DC-212-W47-001, DC-212-W47-002, BV-212-W47-001, FIL-212-W47-001, FIL-212-W47-003, ED-212-W47-001 and/or BMF-212-W47-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for DC-212-W47-001, DC-212-W47-002, BV-212-W47-001, FIL-212-W47-001, FIL-212-W47-003 and/or BMF-212-W47-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.a.

b. **Opacity**

See Source-Wide Conditions S3.b.

c. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.c.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

212-W47 Comments

The potential controlled hourly PM emissions from EP H-212-W47-001, FR-212-W47-001, FD-212-W47-001, MX-212-W47-001, DD-212-W47-001, H-212-W47-003, CV-212-W47-003, CV-212-W47-004, H-212-W47-004, EXR-212-W47-001, PD-212-W47-001, VS-212-W47-001, HT-212-W47-001, H-212-W47-006, CV-212-W47-006, H-212-W47-007, RS-212-W47-001, and PD-212-W47-003, meet the applicable emission standard in Regulation 7.08 after the first control device. The potential uncontrolled hourly PM emissions from EP H-212-W47-005, FD-212-W47-002, CV-212-W47-005, and PD-212-W47-002 meet the applicable emission standard in Regulation 7.08.

EU 212-W48: CA131 System; Mixing, forming and calcination of catalysts. Phosphoric acid and diatomaceous earth (silicon dioxide) are mixed together, extruded, calcined and screened to form a catalyst

212-W48 Applicable Regulations

Federally Enforceable Regulations		
Regulation Title Applicable Sections		
7.08	Standards of Performance for New Process Operations	1 through 3

District Only Enforceable Regulations			
Regulation Title Applicable Sections			
NA	NA	NA	

212-W48 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
H-212-W48-001	Earth Bag Dump Hopper				
H-212-W48-002	Wet Earth Hopper				
VS-212-W48-001	Green Pellet Screener				
MX-212-W48-001	Turbo Mixer				
EXR-212-W48-001	Pelletizer	1997	7.08	DC-212-W48-	S-212-
VS-212-W48-002	Vibrating Smoother	1997	7.08	001	W48-013
RS-212-W48-002	Rotary Screener				
PD-212-W48-001	Screener Drums				
SSD-212-W48-001	Packager				
H-212-W48-007	Tray Dump Hopper				
FR-212-W48-001	Wet Earth Filter Receiver	1997	7.08	FIL-212-W48- 001	S-212- W48-005
FR-212-W48-004	Earth Dryer Feed Filter Receiver	1997	7.08	FIL-212-W48- 002	S-212- W48-006
HT-212-W48-001	Earth (Steam) Dryer	1007	7.00	DC-212-W48-	S-212-
H-212-W48-003	Dry Earth Hopper	1997	1997 7.08		W48-007
FR-212-W48-003	Dry Earth Filter Receiver	1997	7.08	FIL-212-W48- 004	S-212- W48-008
H-212-W48-004	Earth Weigh Hopper	1997	7.08 NA		S-212- W48-009
HT-212-W48-002	Box Calciner, 1.5 MMBtu/hr	1997	7.08	ED-212-W48-002	S-212-
HT-212-W48-003	Box Calciner, 1.5 MMBtu/hr	2003	7.08	SC-212-W48-001	W48-011
CV-212-W48-004	Belt Conveyor				
H-212-W48-006	Pellet Dusting Hopper	1997	7.08	NA	Fugitive
H-212-W48-008	Transfer Hopper				
SEP-212-W48-001	Separator Receiver	1997	7.08	FIL-212-W48- 003	S-212- W48-012

212-W48 Control Devices

Control ID	Description	Stack ID
DC-212-W48-001	Baghouse (97.287%), Donaldson, Model Torit DFT-4-32 Downflo	S-212-W48-013
FIL-212-W48-001	Secondary Filter (95%), McMaster Carr, Model 5169K74	S-212-W48-005
FIL-212-W48-002	Secondary Filter (95%), McMaster Carr, Model 5169K74	S-212-W48-006
FIL-212-W48-003	Secondary Filter (95%), Donaldson, Model Torit TD-162	S-212-W48-012
FIL-212-W48-004	Secondary Filter (95%), McMaster Carr, Model 5169K74	S-212-W48-008
DC-212-W48-002	Baghouse (99.054%), CP Env., Model 36TNT006S	S-212-W48-007
ED-212-W48-002	Eductor (95%/75%), Wiegland	S-212-W48-011

212-W48 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. PM/PM_{10}

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
H-212-W48-001, FR-212-W48-001, H-212-W48-002, FR-	2.34 each
212-W48-004, HT-212-W48-001, H-212-W48-003, FR-212-	
W48-003, H-212-W48-004, MX-212-W48-001, EXR-212-	
W48-001, and H-212-W48-006	
VS-212-W48-001, HT-212-W48-002, HT-212-W48-003,	3.81 each
SEP-212-W48-001, VS-212-W48-002, and RS-212-W48-002	
H-212-W48-007, CV-212-W48-004, H-212-W48-008, PD-	3.59 each
212-W48-001, and SSD-212-W48-001	

ii. The owner or operator shall not allow the throughput to exceed the following limits. (See Comment 2.)

EP	Throughput (lb/hr)
H-212-W48-004	468
H-212-W48-006	117

iii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b.

c. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05 and 7.08 section 3.1.2)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and DC-204-W40-001 was not operating, the owner or operator shall maintain the following

records:

- 1) The duration of the control device downtime:
- 2) The process throughput during the control device downtime;
- The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

See Source-Wide Conditions S2.c.

c. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-212-W48-001, FIL-212-W48-001, FIL-212-W48-002, FIL-212-W48-003, FIL-212-W48-004, DC-212-W48-002, and ED-212-W48-002 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-212-W48-001, FIL-212-W48-002, FIL-212- W48-003	1.0 – 10.0
FIL-212-W48-001, FIL-212-W48-004, DC-212-W48-002	1.5 – 6.5

- iii. For ED-212-W48-002, the owner or operator shall monitor and maintain records of the inlet water flow rate at least once during each operating day to ensure it is greater than or equal to 45 gpm.
- iv. For any period of operating outside the established performance indicator range for DC-212-W48-001, FIL-212-W48-001, FIL-212-W48-002, FIL-212-W48-003, FIL-212-W48-004, DC-212-W48-002, and/or ED-212-W48-002, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for DC-212-W48-001, FIL-212-W48-001, FIL-212-W48-003, FIL-212-W48-004, DC-212-W48-004, DC-212-W48-004,

002 and/or ED-212-W48-002 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in \$2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

See Source-Wide Conditions S3.b.

c. Control Device Operation

Identification of all periods of operating outside the establishfed performance indicator range for a control device, including the information recorded in S2.c.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

212-W48 Comments

- 1. The potential controlled hourly PM emissions from EP H-212-W48-001, FR-212-W48-001, H-212-W48-002, FR-212-W48-004, HT-212-W48-001, H-212-W48-003, FR-212-W48-003, MX-212-W48-001, EXR-212-W48-001, VS-212-W48-001, HT-212-W48-002, HT-212-W48-003, H-212-W48-007, SEP-212-W48-001, VS-212-W48-002, RS-212-W48-002, and PD-212-W48-001 meet the applicable emission standard in Regulation 7.08 after the first control device. The potential uncontrolled hourly PM emissions from EP CV-212-W48-004, H-212-W48-008, and SSD-212-W48-001 meet the applicable emission standard in Regulation 7.08. The permit limits the hourly processing rate for EP H-212-W48-004 and H-212-W48-006 because the potential uncontrolled hourly PM emissions do not meet the applicable emission standard in Regulation 7.08.
- 2. Throughput limits are required for EP H-212-W48-004 and H-212-W48-006 to meet the applicable emission standard in Regulation 7.08.

EU 220-W51: Acid Unloading System; Unloading of nitric acid and acetic acid from tanker trucks for storage in Building 20 and other locations within the plant

220-W51 Applicable Regulations

Federally Enforceable Regulations						
Regulation	Regulation Title Applicable Section					
<u>7.12</u>	Standards of Performance for New Storage Vessels for Volatile Organic Compounds	1, 2, 3, and 7				

District Only Enforceable Regulations						
Regulation Title Applicable Section						
5.00	Definitions	1 through 2				
<u>5.01</u>	General Provisions	1 through 4				
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5				
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6				

220-W51 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
T-220-W51-001	HNO ₃ Storage Tank (unloading and breathing), 10,576 gal	1996	5.21	ED-220- W51-001	S-220- NITR-14
T-220-Acid-800	Acetic Acid Storage Tank, 9,770 gal	2000	7.12	NA	S-220- NITR-14

220-W51 Control Devices

Control ID	Description	Stack ID
ED-220-W51-001	Eductor (75%), Schutte & Koerting, Model 7014	S-220-NITR-14

220-W51 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

- i. For EP T-220-Acid-800, the owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia unless tank is equipped with submerged fill. (Regulation 7.12, section 3) (See Comment 2.)
- ii. See Source-Wide Conditions S1.a.

b. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 2.)

c. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.05, 5.00, and 5.21)

S2. **Monitoring and Record Keeping** (Regulation 2.16, section 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

- i. See <u>Source-Wide Conditions S2.a.</u>
- ii. The owner or operator shall maintain records of the material stored and the vapor pressure in EP T-220-Acid-800 and if the contents of the storage vessel are changed a record shall be made of the new contents, the new vapor pressure, and the date of the change in order to demonstrate compliance with S1.a.i.

b. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.

ii. See Source-Wide Conditions S2.f.

c. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of ED-220-NITR-001 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. For ED-220-W51-001, the owner or operator shall monitor and maintain records of the inlet water flow rate at least once during each operating day to ensure it is greater than or equal to 60 gpm.
- iii. For any period of operating outside the established performance indicator range for ED-220-W51-001, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the performance indicator range for ED-220-W51-001 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. **VOC**

See Source-Wide Conditions S3.a.

b. TAC

- i. Identification of all periods when a process was operating and an associated TAC control device was not operating, including the information recorded in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

c. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.c.iii. If there were no excursions during the reporting period, the compliance report must

include a statement to that effect.

220-W51 Comments

1. The potential controlled nitric acid emissions from EP T-220-W51-001 are below the de minimis levels in Regulations 5.00 and 5.21.

2. The vapor pressure of acetic acid is 1.5 kPa (0.217 psia) at 20°C.

EU 220-W52, 220-W53 and 220-W54:

EU 220-W52: Nickel Nitrate System; Dissolving metallic nickel in nitric acid to manufacture nickel nitrate solutions

EU 220-W53: Reforming Catalysts Manufacturing; Formed alumina carrier dipped in a nickel nitrate solution and transferred to a belt furnace to convert the nickel nitrate to nickel oxide

EU 220-W54: Rotary Calcination; Formed alumina carrier is dipped in a solution of metallic nitrates and transferred to rotary calciner to decompose the nitrates

220-W52, 220-W53 and 220-W54 Applicable Regulations

Federally Enforceable Regulations						
Regulation Title Applicable Sections						
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 4				
40 CFR 63 Subpart	National Emission Standards for Hazardous Air Pollutants	See Source-Wide				
VVVVV	for Chemical Manufacturing Area Sources	Specific Conditions				

District Only Enforceable Regulations					
Regulation Title Applicable Section					
<u>5.00</u>	Definitions	1 through 2			
<u>5.01</u>	General Provisions	1 through 4			
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3			
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5			
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6			

220-W52, 220-W53 and 220-W54 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
220- W52	T-220-W52-004	Acid Batch (HNO ₃) Tank	1996	5.21	NA	S-220- NITR-01
	T-220-W52-003	Recovered Acid (HNO ₃) Tank	1996	5.21	NA	S-220- NITR-01
	T-220-W52-012	Acid Weight (HNO ₃) Tank	1996	5.21	NA	S-220- NITR-01
	T-220-W52-005	Reactor, 9,770 gal	1996	7.08, 5.21	ED-220-NITR-002 V-220-NITR-001 ED-220-NITR-008 SC-220-NITR-001 V-220-NITR-002	S-220- NITR-11
220- W53	DD-220-W53- 006	Drum Dumper				
	H-220-W53-011	Hopper		7.00 5.21		
	FD-220-W53-005	Feeder	1996	7.08, 5.21, 40 CFR 63	DC-220-W53-006	S-220-
	BE-220-W53-001	Belt Elevator	1990	VVVVVV	DC-220-W33-000	W53-003
	FD-220-W53-020	Feeder		* * * * * *		
	SL-220-W53-012	Soft Loader				
	H-220-W53-012	Hopper				
	SL-220-W53-013	Soft Loader	1996	7.08, 5.21,	DC-220-W53-006	S-220-
	H-220-W53-013	Hopper	1990	40 CFR 63	DC-220- W 33-000	W53-003

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
	CV-220-W53-	Conveyor		VVVVVV		
	002					
	CV-220-W53- 003	Conveyor				
	CV-220-W53- 005	Conveyor				
	VS-220-W53-003	Screener	1			
	H-220-W53-016	Hopper	1			
	FD-220-W53-007		1			
	FD-220-W53-019	Feeder				
	HT-220-W53-002	Belt Calciner, 3.0 MMBtu/hr	1996	7.08, 5.21, 40 CFR 63 VVVVVV	DC-220-W53-003/ DC-220-W53-004, ED-220-W52-004- 008 SC-220-W52-001 V-220-W52-002	S-220- W53-005
	SSD/SL-220-	Supersack Drum		7.00 5.01		
	W53-003	Loader	1006	7.08, 5.21,	DC-220-W53-004	S-220-
	BE-220-W53-002	Belt elevator	1996	40 CFR 63 VVVVVV	DC-220-W53-004	W53-006
	VS-220-W53-004	Screener		V V V V V		
220- W54	DD-220-W54- 001	Drum Dumper				
	H-220-W54-001	Hopper				
	DD-220-W54- 002	Drum Dumper				
	H-220-W54-002	Hopper	1			
	DD-220-W54- 004	Drum Dumper	1006	7.08, 5.21,	DC-220-W54-002	S-220-
	DD-220-W54- 005	Drum Dumper	1996	40 CFR 63 VVVVVV	FIL-220-W54-002	W54-010
	H-220-W54-006	Hopper	1			
	FD-220-W54-003					
	DD-220-W54- 020	Drum Dumper				
	CV-220-W54- 020	Conveyor				
	HT-220-W54- 001a	Rotary Calciner	1996		V-220-W54-001	S-220- W54-015
	HT-220-W54- 001b	Rotary Calciner	1996	7.08, 5.21, 40 CFR 63 VVVVVV	ED-220-W52-003, ED-220-W52-008, SC-220-W52-001, V-220-W52-002	S-220- W54-011
	CV-220-W54- 004	Conveyor				
	H-220-W54-007	Hopper	1	7.00.7.21		
	FD-220-W54-004		1006	7.08, 5.21, 40 CFR 63 VVVVVV	DC-220-W54-005 FIL-220-W54-005	S-220-
	FD-220-W54-006		1996			W54-009
	VS-220-W54-002		1			
	VS-220-W54-020	Screener	1			
	H-220-W54-008	Hopper	1			

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
	SSD-220-W54-	Super Sack				
	002	Drummer				
	H-220-W54-020	Hopper				

220-W52, 220-W53 and 220-W54 Control Devices

Control ID	Description	Stack ID
DC-220-W54-002	Baghouse (99.786%), Flex-Kleen, Model 226-CDCC-3-2-12(III), 1996	S-220-NITR-010
DC-220-W53-003	Baghouse (99.786% PM, 75% NO _X), Flex-Kleen, Model 226-CDCC-4-3-24	S-220-W53-005
DC-220-W53-004	Baghouse (99.786% PM, 75% NO _X), Flex-Kleen, Model 226-CDCC-3-2-12	S-220-NITR-006
DC-220-W54-005	Baghouse (99.786%), Flex-Kleen, Model 226-CDCC-4-3-24(III), 1996	S-220-NITR-009
DC-220-W53-006	Baghouse (99.786%), Flex-Kleen, Model 226-CDCC-3-2-12	S-220-NITR-003
ED-220-W52-002	Eductor (75% NO _X), Schutte & Koerting, Model 7014 S	S-220-NITR-011
ED-220-W52-003	Eductor ((95%) PM, (75%) Ammonia), Schutte & Koerting, Model 7014 L 8, 1996	S-220-NITR-011
ED-220-W52-004	Eductor (75% NO _X), Schutte & Koerting, Model 7014 L 8	S-220-NITR-011
ED-220-W52-005	Eductor (75% NO _X), Schutte & Koerting, Model 7014 L 8	S-220-NITR-011
ED-220-W52-006	Eductor (75% NO _X), Schutte & Koerting, Model 7014 L 8	S-220-NITR-011
ED-220-W52-007	Eductor (75% NO _X), Schutte & Koerting, Model 7014 L 8	S-220-NITR-011
ED-220-W52-008	Eductor ((95%) PM, (75%) NO _x & Ammonia), Schutte & Koerting, Model 7014 L 8, 1996	S-220-NITR-011
FIL-220-W54-002	HEPA Filter (99.97%), Camill Farr 855210008, 2007	S-220-NITR-010
FIL-220-W54-005	HEPA Filter (99.97%), Camill Farr 855210008, 2007	S-220-NITR-010
SC-220-W52-001	Impingement Plate Scrubber (95%) PM, (75%) NO _X & Ammonia), W. W. Sly, Model 330, 1996	S-220-NITR-011
V-220-W54-001	Packed Scrubber Tower (75% NO _X), Croll Reynolds, Model 30T-15-10H/48V	S-220-NITR-015
V-220-W52-002	Packed Tower Scrubber #2 (75% NO _X), Croll Reynolds, Model 72T-10NOX	S-220-NITR-011

EU 220-W52, 220-W53 and 220-W54 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EU	EP	Emission Limit (lb/hr)
220-	DD-220-W53-006, H-220-W53-011, FD-220-W53-005,	2.81 each
W53	BE-220-W53-001, FD-220-W53-020, SL-220-W53-012, H-	
	220-W53-012, SL-220-W53-013, H-220-W53-013, CV-	
	220-W53-002, CV-220-W53-003, CV-220-W53-005, VS-	
	220-W53-003, FD-220-W53-019, HT-220-W53-002, H-	
	220-W53-016, FD-220-W53-007, SSD/SL-220-W53-003,	
	BE-220-W53-002, VS-220-W53-004	
220-	DD-220-W54-001, H-220-W54-001, DD-220-W54-002, H-	3.59 each
W54	220-W54-002, DD-220-W54-004, DD-220-W54-005, H-	
	220-W54-006, FD-220-W54-003, CV-220-W54-004, H-	
	220-W54-007, FD-220-W54-004, VS-220-W54-002, H-	
	220-W54-008, FD-220-W54-006, SSD-220-W54-002, VS-	
	220-W54-020, H-220-W54-020	
	DD-220-W54-020	5.52
	CV-220-W54-020	2.34
	HT-220-W54-001	2.49

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See Source-Wide Conditions S1.b. (See Comment 2.)

c. NO_X

- i. From EP T-220-W52-005, HT-220-W53-002 and HT-220-W54-001b, the owner or operator shall not allow or cause the emissions of NO_X to exceed 300 ppmv, expressed as NO_2 . (See Comment 3.)
- ii. See Source-Wide Conditions S1.a.

d. HAP

See Source-Wide Conditions S1.c.

e. TAC

See Source-Wide Conditions S1.d. (See Comment 4.)

f. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

- i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. NO_X

- i. For any period of time when the process was operating and a NO_X control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of NO_X (ppmv and tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.d.

d. HAP

See Source-Wide Conditions S2.e.

e. TAC

i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- 3) The emissions of each TAC (lb/hr and lb/avg. period); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

f. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-220-W54-002, DC-220-W53-003, DC-220-W53-004, DC-220-W54-005, DC-220-W53-006, ED-220-W52-002, ED-220-W52-003, ED-220-W52-004, ED-220-W52-005, ED-220-W52-006, ED-220-W52-007, ED-220-W52-008, FIL-220-W54-002, FIL-220-W54-005, SC-220-W52-001, V-220-W54-001 and/or V-220-W52-002 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop
ED-220-W52-004	1.5 - 3.5" w.c.
ED-220-W52-002, ED-220-W52-004,	
ED-220-W52-005, ED-220-W52-006,	> 60 psi
ED-220-W52-007	
ED-220-W52-003, ED-220-W52-008	> 40 psi
DC-220-W54-002, DC-220-W53-003,	
DC-220-W53-004, DC-220-W54-005,	1.0 - 5.0 " w.c.
DC-220-W53-006	
FIL-220-W54-002, FIL-220-W54-005	0.2 - 10.0 " w.c.
SC-220-W52-001	> 7 psi
V-220-W54-101	> 10 psi

iii. The owner or operator shall monitor and maintain records of the inlet water flow rate at least once during each operating day to ensure it is greater than or equal to the operating ranges as shown in the table below.

Emission Point	Inlet water flowrate (gpm)
ED-220-W52-003	5 – 15
ED-220-W52-004, ED-220-W52-005,	5 – 25

Emission Point	Inlet water flowrate (gpm)
ED-220-W52-006, ED-220-W52-007	
V-220-W52-002	> 10

- iv. For any period of operating outside the established performance indicator range for DC-220-W54-002, DC-220-W53-003, DC-220-W53-004, DC-220-W54-005, DC-220-W53-006, ED-220-W52-002, ED-220-W52-003, ED-220-W52-004, ED-220-W52-005, ED-220-W52-006, ED-220-W52-007, ED-220-W52-008, FIL-220-W54-002, FIL-220-W54-005, SC-220-W52-001, V-220-W54-001 and/or V-220-W52-002, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for DC-220-W54-002, DC-220-W53-003, DC-220-W53-004, DC-220-W54-005, DC-220-W53-006, ED-220-W52-002, ED-220-W52-003, ED-220-W52-004, ED-220-W52-005, ED-220-W52-006, ED-220-W52-007, ED-220-W52-008, FIL-220-W54-002, FIL-220-W54-005, SC-220-W52-001, V-220-W54-001 and/or V-220-W52-002 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.a.</u>

b. **Opacity**

There are no reporting requirements for this emission unit.

c. NO_X

i. Identification of all periods when a NO_X process was operating and a NO_X control device was not operating, including the information in S2.c.i., or a negative declaration if the control devices were operating at all times the processes were operating during the reporting period.

ii. Identification of all periods of exceeding the NO_X emission standard or limit during a reporting period, or a negative declaration if there were no excursions during the reporting period.

iii. See Source-Wide Conditions S3.a.

d. HAP

See Source-Wide Conditions S3.c.

e. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.e.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See <u>Source-Wide Conditions S3.d.</u>

f. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.f.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

EU 220-W52, 220-W53 and 220-W54 Comments

- 1. The potential controlled hourly PM emissions from HT-220-W54-001b meet the applicable emission standard in Regulation 7.08 after the first control device. The potential uncontrolled hourly PM emissions for all other emission points meet the applicable emission standard in Regulation 7.08.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential controlled NO_X emissions from EP T-220-W52-005, HT-220-W53-002 and HT-220-W54-001b meet the applicable NO_X emission standard in Regulation 7.08.
- 4. The potential uncontrolled TAC emissions of nitric acid from EP T-220-W52-004, T-220-W52-003, and T-220-W52-012 are below the de minimis levels in Regulations 5.00 and 5.21.

Except where a tier 3 analysis is noted, the potential TAC emissions for the emission points in the table below are less than the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	EP	NH_3	Co	Cr(III)	Cu	Mn	Ni
220- W53	DD-220-W53-006, FD-220-W53-005 and - 007, BE-220-W53-001, SL-220-W53-012, - 013, and -016, H-220-W53-011, -012 and - 013, CV-220-W53-002 and -003, VS-220-			*	1 st	1 st	Tier 3

EU	EP	NH ₃	Co	Cr(III)	Cu	Mn	Ni
	W53-003, FD-W53-019 and -020, HT-220-						
	W53-002, and CV-220-W53-005						
	VS-220-W53-004, SSD/SL-220-W53-003 and			*	1 st	1 st	1 st
	BE-220-W53-002				1	1	1
	DD-220-W54-001 and -002, H-220-W54-001						2 nd
	and -002						_
	DD-220-W54-004					1^{st}	2^{nd}
	DD-220-W54-005, H-220-W54-006, FD-220-					1 st	1 st
	W54-003					1	1
220	DD-220-W54-020		2^{nd}				2^{nd}
220- W54	CV-220-W54-020		1 st		-		1 st
W 34	HT-220-W54-001b	1 st	4 th	*	2^{nd}	2^{nd}	2^{nd}
	CV-220-W54-004		2^{nd}	*	1 st	1 st	2^{nd}
	VS-220-W54-002, H-220-W54-008, FD-220-		1 st	*	1 st	1 st	2 nd
	W54-006, SSD-220-W54-002		1		1	1	4
	H-220-W54-007, FD-220-W54-004		1^{st}	*	1^{st}	1^{st}	2^{nd}
	VS-220-W54-020, H-220-W54-020		2^{nd}		1^{st}		2^{nd}

^{*}This emission point can meet the de minimis value without a control device.

For emission points with potential controlled TAC emissions of nickel above the averaging period de minimis levels, the source performed a tier 3 analysis, resulting in the following risks.

EU	EP	TAC	Location	Risk	Status	HQ	Status
220- W53	DD-220-W53-006, H-220-W53-011, -012, -013 and -016, FD-220-W53-005 and -007, BE-220-W53-001, SL-220-W53-012 and -013, CV-220-W53-002, -003 and -005, VS-220-W53-003, FD-220-W53-019 and -020, HT-220-W53-002	Ni	unadjusted	0.46	≤ 1.0	1	1

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 250-W55 and 250-W56: Houdry and Houdry Screening Systems

EU 250-W55: Houdry; raw material handling, catalyst forming, heat treating, screening, and packaging. Alumina carrier is formed and heat treated. The formed carrier is dipped in chromic acid solution and further heat treated for final catalyst product.

EU 250-W56: Houdry Screening System; Screening system for catalyst products

250-W55 and 250-W56 Applicable Regulations

Federally Enforceable Regulations							
Regulation Title Applicable Section							
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 4					
40 CFR 63 Subpart	National Emission Standards for Hazardous Air	See Source-Wide					
VVVVV	Pollutants for Chemical Manufacturing Area Sources	Specific Conditions					

District Only Enforceable Regulations							
Regulation	Regulation Title Applicable Section						
<u>5.00</u>	Definitions	1 through 2					
<u>5.01</u>	General Provisions	1 through 4					
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3					
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5					
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6					

250-W55 and 250-W56 Emission Points

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
250- W55	DD-250-W55-101 / T-250-W55-105	Hi-Level Drum Dumper/ Chromium Makeup Tank, 5639 gal	1993	7.08, 5.21, 40 CFR 63 VVVVVV	ED-250-W55-801 SC-250-W55-801/ BMF-250-W55-801 or ED-250-W55- 901, SC-250-W55- 901	S-250- W55-031
	T-250-W55-102	HNO ₃ Storage Tank & Unload, 10,576 gal	1993	5.21	NA	S-250- W55-001
	AS-250-W55-201	Airslide Conveyor				
	V-250-W55-202	Alumina Truck/ Silo	1993	7.08	BV-250-W55-202 BV-250-W55-203	S-250- W55-009
	V-250-W55-204	Dense Phase Transport System			B v -250- w 55-205	W33-007
	CV-250-W55-403	Belt Conveyor	1996			
	CV-250-W55- 404/405	Belt Conveyors, only one operated at a time	1993	5.21	NA	Fugitive
	DD-250-W55-301	Drum Dumper	1993	7.08	DC-250-W55-601	S-250-
	DD-250-W55-302	Drum Dumper	1993	7.08, 5.21		W55-018
	FD-250-W55-301	Vibratory Feeder	1993	7.08, 5.21	BV-250-W55-303	S-250-

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
	FD-250-W55-403	L/W Feeder				W55-011
		Fines				
-	GR-250-W55-301	Rework Grinder				
	H-250-W55-305	Rework Fines				
	H-250-W55-302	Hopper In Use Hopper				S-250-
	H-230-W 33-302	in Ose Hopper	1993	7.08	BV-250-W55-302	W55-010
	H-250-W55-303	Hercoflat Hopper	1993	7.08	DC-250-W55-601	S-250-
	H-250-W55-304	Rework Surge Hopper	1993	7.08, 5.21	DC-230-W33-001	W55-018
	H-250-W55- 402/403	2 Feed Hoppers, only one operated at a time	1993	5.21	NA	Fugitive
	MM-250-W55- 401/402	2 Mix Mullers, only one operated at a time	1993	7.08, 5.21	ED-250-W55-401 SC-250-W55-401	S-250-
	HT-250-W55-401	Proctor & Schwartz Belt Dryer, 940,000 BTU/hr		,	BMF-250-W55-401	W55-017
	PE-250-W55- 401/402	Pellet Mills, only one operated at a time	1993	5.21	NA	Fugitive
	MS-250-W55-401	Material Spreader				
	CV-250-W55-401	Screw Conveyor				
	CV-250-W55-402	Vibratory Conveyor				
	EPD-250-W55-	Emergency	1			
	401	Drumout				
	DD-250-W55-401	Drum Dumper				
	FD-250-W55-406	Vibratory Feeder	1	7.00 5.21		
	H-250-W55-401	Refeed Surge Hopper	1993	7.08, 5.21, 40 CFR 63	DC-250-W55-601	S-250- W55-018
	BE-250-W55-501	Bucket Elevator	1	VVVVVV		1133 010
	CV-250-W55-501	Rework Screw	1			
	250 1155 501	Conveyor				
	H-250-W55-501	Dehydrator Feed Hopper				
	VS-250-W55-501	Vibratory Screener]			
	BE-250-W55-601	Bucket Elevator				
	CV-250-W55-502	Metering Metering	1	7.08, 5.21,		a
	2 7 255 77 55 502	Conveyor Reversible	1993	40 CFR 63 VVVVVV	DC-250-W55-601	S-250- W55-018
	CV-250-W55-601	Metering	1			

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID				
		Conveyor								
	EPD-250-W55-	Emergency								
	501	Drumout								
	EPD-250-W55-	Emergency								
	601	Drumout								
	DD-250-W55-501	Drum Dumper								
	DD-250-W55-601	Refeed Drum								
		Dumper								
	FD-250-W55-501	Vibratory Feeder								
	FD-250-W55-601	Vibratory Feeder								
	H-250-W55-502	Hopper								
	H-250-W55-601	Heat Treater								
		Feed Hopper								
	H-250-W55-602	Refeed Surge								
		Hopper								
	VS-250-W55-601	Vibratory								
		Screener								
	BE-250-W55-701	Bucket Elevator								
	HE-250-W55-701	Product Cooler								
	HT-250-W55-501	Dehydrator	1993	7.08, 5.21	ED-250-W55-601	S-250-				
		Vessel			SC-250-W55-601	W55-024				
	HT-250-W55-601	Heat Treater	1993	7.08	V-250-W55-603	1133 021				
	EPD-250-W55-	Emergency			FII -250-W55-901					
	801	Drumout		7.08, 5.21,		S-250-				
	CV-250-W55-801	Metering	1993	40 CFR 63		W55-030				
		Conveyor		VVVVVV	200 1100 301	1100 000				
	FD-250-W55-901	Vibratory Feeder								
	FD-250-W55-702	Vibratory Feeder								
	FD-250-W55-703	Vibratory Feeder		7.08, 5.21,	ED-250-W55-801	a a				
	HT-250-W55-701	Wyssmont Heat	1993	40 CFR 63	SC-250-W55-801	S-250-				
	N. 250 W.55 702	Treat Furnace		VVVVVV	BMF-250-W55-801	W55-027				
	V-250-W55-703	Impregnator								
	DD 250 W55 501	Hopper								
	DD-250-W55-701	Drum Dumper								
	BE-250-W55-801	Bucket Elevator								
	H-250-W55-703	Refeed Surge		7.08, 5.21,						
	H 250 W/55 001	Hopper	1002	40 CFR 63	ED-250-W55-901	S-250-				
	H-250-W55-801	Chrome Heat	1993	VVVVVV	SC-250-W55-901	W55-031				
		Treater Feed								
	BE-250-W55-901	Hopper Bucket Elevator								
	HE-250-W55-901	Product Cooler				0.050				
	V-250-W55-701	Measure Pot	1993	7.08, 5.21	DC-250-W55-601	S-250-				
	VS-250-W55-701	Vibratory Screen			00 250 1155 002	W55-018				
	HT-250-W55-801	Chrome Heat		7.08, 5.21,	SC-250-W55-802	0.050				
		Treater						40 CFR 63	ED-250-W55-802	S-250- W55-027
				VVVVVV	SC-250-W55-801 BMF-250-W55-801	vv 33-02/				
	FD-250-W55-902	Feeder		7.09 5.21	DC-250-W56-959	S-250-				
	H-250-W55-901	Final Product	1993	7.08, 5.21, 40 CFR 63	FIL-250-W56-959	W56-032				

EU	Emission Point	Description	Construction Date	Regulations	Control Device	Stack ID
		Surge Hopper		VVVVVV		
	SS-250-W55-901	Packager				
	VS-250-W55-901	Vibratory Screen				
	H-250-W55-306	Hopper	2009	7.08, 5.21	BV-250-W55-306 DC-250-W55-201	S-250- W55-201
	SSU-250-W55- 201	Supersack Unloader				
	V-250-W55-205	Dense Phase Transfer Pot	2000	7.08, 5.21,	D.G. 050 W.55 001	S-250-
	SSU-250-W55- 301	Supersack Unloader	2009	40 CFR 63 VVVVVV	DC-250-W55-201	W55-201
	FD-250-W55-407	Batch Feeder				
	FD-250-W55-408	Batch Feeder				
	BE-250-W55-1020	Bucket elevator				
	VS-250-W55-1020	Vibratory screen	2012	7.00 5.21	DC 250 W55 (01	S-250-
	PA-250-W55-1020	Packager	2013	7.08, 5.21	DC-250-W55-601	W55-018
	H-250-W55-1020	Hopper				
	DD-250-W55- 1015	Drum dumper	2013	7.08, 5.21		
	SSU-250-W55- 1016	Supersack unloader				
	SSB-250-W55- 1017	Supersack baler			DC-250-W55-1028 FIL-250-W55-1028	
	CV-250-W55- 1015	Conveyor				S-250- W55-034
	BE-250-W55- 801B	Bucket elevator	2013	7.08, 5.21, 40 CFR 63		
	FD-250-W55- 902B	Feeder		VVVVV		
	VS-250-W55- 901B	Vibratory screen				
	H-250-W55-901B	Final product surge hopper				
	SS-250-W55-901B					
	HT-250-W55- 801B-801	Chrome heat treater as 801 carrier ht tr.	2013	7.08, 5.21, 40 CFR 63 VVVVVV	SC-250-W55-802B ED-250-W55-802B SC-250-W55-801B SC-250-W55-801C BMF-250-W55- 801B	S-250- W55-027
	HT-250-W55- 801B-601	Chrome heat treater as 601 carrier ht tr.	2013	7.08, 5.21	ED-250-W55-601B ED-250-W55-601B SC-250-W55-601B V-250-W55-603B	S-250- W55-035 S-250- W55-036
	H-250-W55-801B	Chrome heat treater feed hopper	2013	7.08, 5.21, 40 CFR 63	DC-250-W55-1027	S-250-
	H-250-W55-802B CV-250-W55- 801B	Hopper Metering conveyor	2013	VVVVVV	FIL-250-W55-1027	W55-033

EU	Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
	BE-250-W55- 901B	Bucket elevator				
	FB-250-W55- 801B	Firebox, 1.5 MMBtu/hr	2013	7.06	NA	NA
250-	DD-250-W56-950	Drum Dumper				
W56	DD-250-W56-951	Drum Dumper				
	H-250-W56-952	Hopper				
	H-250-W56-953	Hopper		7.00 5.21		
	CV-250-W56-954	Feed Conveyor	1994	7.08, 5.21, 40 CFR 63	DC-250-W56-959	S-250-
	CV-250-W56-955	Feed Conveyor	1994	VVVVVV	FIL-250-W56-959	W56-032
	VS-250-W56-956	Vibratory	1			
		Screener				
	SS-250-W56-957	Super Sack				
		Packager				

250-W55 and 250-W56 Control Devices

G / IID	D 1.4	G. I
Control ID	Description	Stack
BMF-250-W55-401	Cartridge Filter (95%), Monsanto, Model 392-035	S-250-W55-017
BMF-250-W55-801	Brinks Mist Eliminator (99%), Monsanto, Model 392-035	S-250-W55-027
BMF-250-W55-	Brownian Motion Mist Eliminator (99%) Monsanto Enviro-	S-250-W55-035
801B	Chem	
BV-250-W55-202	Bin Vent Filter (99.343%), Mikropul, Model 100S-8-20-TC	S-250-W55-009
BV-250-W55-203	Bin Vent Filter (99.343%), Mikropul, Model 100S-8-20-TC	S-250-W55-009
BV-250-W55-301	Bin Vent Filter (99.343%), Mikropul, Model 100S-8-20-TC	S-250-W55-015
BV-250-W55-302	Bin Vent Filter (99.343%), Mikropul, Model 165-8-30B	S-250-W55-010
BV-250-W55-303	Bin Vent Filter (99.343%), Nol-Tech, Model 600FR-32	S-250-W55-011
BV-250-W55-306	Bin Vent Filter (95%), Libco 8270-K-08	S-250-W55-201
DC-250-W55-201	Baghouse (99.786%), Donaldson Torit DFT 3-18	S-250-W55-201
DC-250-W55-601	Baghouse (99.343%), Mikro-Pulsaire, Model 500-S-20-20-C	S-250-W55-018
DC-250-W55-901	Baghouse (99.786%), Torit, Model DFT 2-8	S-250-W55-030
DC-250-W55-1027	Baghouse (99.786%) Torit Model 2DF8-4 Ultra Web filter	S-250-W55-033
DC-250-W55-1028	Baghouse (99.786%) Torit Model 2DF8-4 Ultra Web filter	S-250-W55-034
DC-250-W56-959	Baghouse (99.786%), Torit, Model DFT 2-8	S-250-W56-032
ED-250-W55-401	Eductor (95% PM, 75%), Schutte & Koerting, Model 7014 S	S-250-W55-017
	14	
ED-250-W55-601	Eductor (95% PM, 75%), Schutte & Koerting, Model 7014 S	S-250-W55-024
	14	
ED-250-W55-601B	Eductor (95%) Schutte & Koerting Model 7014 S 14 inch	S-250-W55-036
ED-250-W55-801	Eductor (95% PM, 75%), Schutte & Koerting, Model 7014 S	
	14	
ED-250-W55-802	Eductor (95% PM, 75%), Schutte & Koerting, Model 7014 S	S-250-W55-027
	14	
ED-250-W55-802B	Eductor (95%) Schutte & Koerting Model 7014 S 14 inch	S-250-W55-035
ED-250-W55-901	Eductor (95% PM, 75%), Anderson, Model P-6542-1	S-250-W55-031
FIL-250-W55-901	HEPA filter (99.97%), Donaldson Model Ultra-Lok	S-250-W55-030
FIL-250-W55-1027	HEPA (99.97%)	S-250-W55-033
FIL-250-W55-1028	HEPA (99.97%)	S-250-W55-034

Control ID	Description	Stack
FIL-250-W56-959	HEPA filter (99.97%), Donaldson Model Ultra-Lok	S-250-W56-032
SC-250-W55-401	Impingement Scrubber (95% PM, 75%) W.W. Sly, Model 330	S-250-W55-017
SC-250-W55-601	Impingement Scrubber (95% PM, 75%) W.W. Sly, Model 330	S-250-W55-024
SC-250-W55-601B	Impingement Scrubber (95% PM, 75% NO _X) W.W. Sly, Model 330	S-250-W55-036
SC-250-W55-801/ ME-250-W55-801	Impingement Scrubber (95% PM, 75%) W.W. Sly, Model 330/ Mist Eliminator (95%), Anderson Model 1.9 CHEAF Aerosol Collector (bolted together)	S-250-W55-031
SC-250-W55-801B	Impingement Scrubber (95% PM, 75% Cr) W.W. Sly, Model 340	S-250-W55-035
SC-250-W55-801C	Scrubber (95% PM, 75% Cr) W.W. Sly, Model to be determined	S-250-W55-035
SC-250-W55-802	Impingement Scrubber (95% PM, 75%) W.W. Sly, Model 330	S-250-W55-027
SC-250-W55-802B	Scrubber (95% PM, 75% Cr) Make to be determined	S-250-W55-035
SC-250-W55-901/ ME-250-W55-901	Spray Tower (95% PM, 75%), Anderson, Model P-6542-1/Mist Eliminator (95%), Anderson Model 1.9 CHEAF Aerosol Collector (bolted together)	S-250-W55-031
V-250-W55-603	Packed Tower Scrubber (95% PM, 75%) Croll Reynolds, Model 48T-24NOX	S-250-W55-024
V-250-W55-603B	Packed Bed Scrubber (95% PM, 75% NO _X) Croll-Reynolds Co., Inc. Model NOx Absorption-48T-24 NOx	S-250-W55-036

250-W55 and 250-W56 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause PM emissions to exceed the following emission limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
V-250-W55-202	18.98
AS-250-W55-201, V-250-W55-204, H-250-W55-302	7.09 each
DD-250-W56-950, DD-250-W56-951, H-250-W56-952, H-	
250-W56-953, CV-250-W56-954, CV-250-W56-955, VS-	
250-W56-956, SS-250-W56-957	5.86 each
SSU-250-W55-201, V-250-W55-205, H-250-W55-306	5.85 each
HT-250-W55-701, V-250-W55-703	4.13
HT-250-W55-401	4.02
BE-250-W55-801	3.95
CV-250-W55-402, EPD-250-W55-401, DD-250-W55-401,	
H-250-W55-401, FD-250-W55-406, VS-250-W55-501, BE-	
250-W55-501, H-250-W55-501, HT-250-W55-501, BE-250-	
W55-1020, VS-250-W55-1020, PA-250-W55-1020, H-250-	
W55-1020	3.81 each
H-250-W55-301	3.59
CV-250-W55-401, MM-W55-401/402	3.57 each
DD-250-W55-701, H-250-W55-703, FD-250-W55-702, FD-	
250-W55-703, EPD-250-W55-801, HT-250-W55-801, H-	
250-W55-801	3.44 each
DD-250-W55-301, H-250-W55-303	3.36 each
CV-250-W55-801, FD-250-W55-901, VS-250-W55-901, H-	
250-W55-901, SS-250-W55-901, FD-250-W55-902, HE-250-	
W55-901, BE-250-W55-901, SS-250-W55-901	3.23 each
CV-250-W55-502, EPD-250-W55-501, H-250-W55-601, VS-	
250-W55-601, HT-250-W55-601, BE-250-W55-601 CV-250-	
W55-1015, BE-250-W55-801B, H-250-W55-801B, HT-250-	
W55-801B as 601 carrier ht tr., DD-250-W55-1015	3.09 each
FD-250-W55-408	3.00
CV-250-W55-601, EPD-250-W55-601, FD-250-W55-601,	
BE-250-W55-701, HE-250-W55-701, V-250-W55-701, VS-	
250-W55-701, H-250-W55-802B, CV-250-W55-801B, BE-	
250-W55-901B, HE-250-W55-901B, FD-250-W55-902B,	
VS-250-W55-901B, H-250-W55-901B, SS-250-W55-901B	2.99 each
SSU-250-W55-1016, SSB-W55-1017, HT-250-W55-801B as	
801 carrier heat treater	2.96 each
DD-250-W55-101/T-250-W55-105, DD-250-W55-302, H-	
250-W55-304, FD-250-W55-301, GR-250-W55-301, H-250-	
W55-305, FD-250-W55-403, DD-250-W55-501, H-250-W55-	
502, CV-250-W55-501, FD-250-W55-501, DD-250-W55-	
601, H-250-W55-602, SSU-250-W55-301, FD-250-W55-407	2.34 each

ii. The owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.116 pounds per million BTU actual total heat input from EP FB-250-W55-801B. (Regulation 7.06, section 4.1.4) (See Comment 3.)

iii. See Source-Wide Conditions S1.a.

b. **Opacity**

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1 and Regulation 7.06, section 4.2) (See Comments 2 and 7.)

$c. SO_2$

The owner or operator shall not cause to be discharged into the atmosphere from EP FB-250-W55-801B any gases which contain sulfur dioxide in excess of 0.97 pounds per million BTU actual total heat input for combustion of gaseous fuels. (Regulation 7.06, section 5.1.1) (See Comment 3.)

d. NO_X

- i. For EP HT-250-W55-501 and HT-250-W55-801 as the 801 carrier heat treater, the owner or operator shall not allow or cause the emissions of NO_X to exceed 300 ppmv, expressed as NO₂. (See Comment 4.)
- ii. See Source-Wide Conditions S1.a.

e. HAP

See Source-Wide Conditions S1.c.

f. TAC

See Source-Wide Conditions S1.d. (See Comments 5 and 6.)

g. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the

following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- The emissions of PM (lb/hr) and PM/PM $_{10}$ /PM $_{2.5}$ (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

 $c. SO_2$

There are no monitoring or record keeping requirements for this emission unit.

d. NO_X

- i. For any period of time when the process was operating and a NO_X control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of NO_X (ppmv and tons); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.d.

e. **HAP**

See Source-Wide Conditions S2.e.

f. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

g. Control Device Operation

i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of BMF-250-W55-401, BMF-250-W55-801, BMF-250-W55-801B, BV-250-W55-202, BV-250-W55-203, BV-250-W55-301, BV-250-W55-302, BV-250-W55-303, BV-250-W55-306, DC-250-W55-201, DC-250-W55-601, DC-250-W55-901, DC-250-W55-1027, DC-250-W55-1028, DC-250-W56-959, ED-250-W55-401, ED-250-W55-601, ED-250-W55-601B, ED-250-W55-801, ED-250-W55-802, ED-250-W55-802B, ED-250-W55-901, FIL-250-W55-901, FIL-250-W55-1027, FIL-250-W55-1028, FIL-250-W56-959, SC-250-W55-401, SC-250-W55-601, SC-250-W55-601B, SC-250-W55-801/ ME-250-W55-801, SC-250-W55-801B, SC-250-W55-801C, SC-250-W55-802, SC-250-W55-802B, SC-250-W55-901, V-250-W55-603, and V-250-W55-603B for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.

ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop
BMF-250-W55-401	1.0 – 5.5 " w.c.
BMF-250-W55-801	< 11 psi
BMF-250-W55-801B	8.0 – 10.0 " w.c.
BV-250-W55-202, BV-250-W55-203, BV-250-W55-301, BV-250-W55-302, BV-250-W55-303	0.1 – 5.0 " w.c.
BV-250-W55-306, DC-250-W55-201	1.5 – 6.5 " w.c.
DC-250-W55-601, DC-250-W55-1027, DC-250-W55-1028, FIL-250-W55-1027, FIL-250-W55-1028, ED-250-W55-801, ED-250-W55-802, ED-250-W55-901, SC-250-W55-401, SC-250-W55-601, SC-250-W55-801C, SC-250-W55-802, SC-250-W55-901	0.1 – 5.0 " w.c.
DC-250-W55-901, DC-250-W56-959, FIL-250-W55-901, FIL-250-W56-959	0.2 – 6.0 " w.c.
ED-250-W55-401	-5.0 – 5.0 " w.c.
ED-250-W55-601	> 80 psi
ED-250-W55-601B, ED-250-W55-802B	> 60 psi each
SC-250-W55-801B (Stage 2)	8.0 – 10.0 " w.c.
V-250-W55-802B	6.0 – 8.0 " w.c.
SC-250-W55-601B and V-250-W55-603B	> 30 psi each

iii. The owner or operator shall monitor and maintain records of the inlet water flow rate at least once during each operating day to ensure it is greater than or equal to the operating ranges as shown in the table below.

Control ID	Inlet water flowrate (gpm)
ED-250-W55-401, ED-250-W55-601, ED-250-W55-601B,	≥ 132

Control ID	Inlet water flowrate (gpm)
ED-250-W55-802B, ED-250-W55-801, ED-250-W55-802	
ED-250-W55-901	≥ 200
SC-250-W55-401, 250-250-W55-601B, SC-250-W55-801B	≥ 20
(Stage 1)	
SC-250-W55-601, SC-250-W55-801, SC-250-W55-801C,	> 5 each
SC-250-W55-802, SC-250-W55-802B,	
SC-250-W55-901	≥ 37
V-250-W55-603 and V-250-W55-603B	≥ 60

- iv. For any period of operating outside the established performance indicator range for BMF-250-W55-401, BMF-250-W55-801, BMF-250-W55-801B, BV-250-W55-202, BV-250-W55-203, BV-250-W55-301, BV-250-W55-302, BV-250-W55-303, BV-250-W55-306, DC-250-W55-201, DC-250-W55-601, DC-250-W55-901, DC-250-W55-1027, DC-250-W55-1028, DC-250-W56-959, ED-250-W55-401, ED-250-W55-601, ED-250-W55-601B, ED-250-W55-801, ED-250-W55-802, ED-250-W55-802B, ED-250-W55-901, FIL-250-W55-901, FIL-250-W55-1027, FIL-250-W55-1028, FIL-250-W56-959, SC-250-W55-401, SC-250-W55-601, SC-250-W55-601B, SC-250-W55-801/ ME-250-W55-801, SC-250-W55-801B, SC-250-W55-801C, SC-250-W55-802, SC-250-W55-802B, SC-250-W55-901, V-250-W55-603, and/or V-250-W55-603B, the owner or operator shall maintain the following records:
 - 1) The date.
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- v. Upon notification to the District, the owner or operator may modify the performance indicator ranges for BMF-250-W55-401, BMF-250-W55-801, BMF-250-W55-801B, BV-250-W55-202, BV-250-W55-203, BV-250-W55-301, BV-250-W55-302, BV-250-W55-303, BV-250-W55-306, DC-250-W55-201, DC-250-W55-901, DC-250-W56-959, ED-250-W55-401, ED-250-W55-601, ED-250-W55-601B, ED-250-W55-802, ED-250-W55-802B, ED-250-W55-901, FIL-250-W56-959, SC-250-W55-401, SC-250-W55-601B, SC-250-W55-801/ ME-250-W55-801, SC-250-W55-801B, SC-250-W55-801C, SC-250-W55-802, SC-250-W55-802B, SC-250-W55-901, V-250-W55-603, and/or V-250-W55-603B once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

 $c. SO_2$

There are no reporting requirements for this emission unit.

d. NO_X

- i. Identification of all periods of bypassing a NO_X control device while an associated NO_X emission point was in operation during a reporting period, including the information in S2.d.i., or a negative declaration if there were no periods of bypassing a control device during the reporting period.
- ii. See Source-Wide Conditions S3.a.

e. HAP

See Source-Wide Conditions S3.c.

f. TAC

- i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.f.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.d.

g. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.g.iv. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

250-W55 and 250-W56 Comments

1. The potential controlled hourly PM emissions from EP AS-250-W55-201, H-250-W55-301, CV-250-W55-502, meet the applicable emission standard in Regulation 7.08 after the second control device. The potential controlled hourly PM emissions from EP CV-250-W55-801, 401, 402, 601, 1015, and 801B, FD-250-W55-901, 902, 406, 601, 702, 703, 408, 407, and 902B, EPD-250-W55-801, 401, 501, and 601, VS-250-W55-901, 501, 601,

701, 1020, and 901B, H-250-W55-901, 801, 302, 303, 401, 501, 601, 703, 306, 1020, 801B, 802B, and 901B, SS-250-W55-901 and 901B, HT-250-W55-801, 401, 501, 601, 701, and 801B, HE-250-W55-901, and 701, BE-250-W55-901, 801, 501, 601, 701, 1020, 801B, and 901B, PA-250-W55-1020, DD-250-W55-101/T-250-W55-105, V-250-W55-204 and 703, 701, and 205, DD-250-W55-301, 401, 701, and 1015, MM-W55-401/402, SSU-250-W55-201, 301 and 1016, SSB-W55-1017, DD-250-W56-950 and 951, H-250-W56-952 and 953, CV-250-W56-954 and 955, VS-250-W56-956, and SS-250-W56-957 meet the applicable emission standard in Regulation 7.08 after the first control device. The potential uncontrolled hourly PM emissions from EP V-250-W55-202, DD-250-W55-302, H-250-W55-304, FD-250-W55-301, GR-250-W55-301, H-250-W55-305, FD-250-W55-403, DD-250-W55-501, H-250-W55-502, CV-250-W55-501, FD-250-W55-501, DD-250-W55-601, H-250-W55-602 meet the applicable emission standard in Regulation 7.08.

- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. For EP FB-250-W55-801B, the District has performed a one-time PM and SO₂ compliance demonstration for the boiler, using AP-42 emission factors and combusting natural gas, and the pounds per million BTU emission standards cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for this boiler with respect to PM and SO₂.
- 4. The potential controlled NO_X emissions from EP HT-250-W55-501 and HT-250-W55-801B-801 meet the applicable NO_X emission standard in Regulation 7.08.
- 5. TAC emissions from the combustion of natural gas are considered to be "de minimis emissions" by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.21, section 2.7)
- 6. Except where a tier 3 analysis is noted in the table below, the potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

EU	Emission Point	Cr(III)	Cr(VI)	Cu	HNO ₃
250- W55	SS-250-W55-901, H-250-W55-802B, CV-250-W55-801B, BE-250-W55-901B, FD-250-W55-902B, VS-	1 st	2 nd		
	250-W55-901B, H-250-W55-901B, SS-250-W55-901B EPD-250-W55-801, FD-250-W55-702		2 nd		
	HT-250-W55-801 H-250-W55-801, BE-250-W55-801, DD-250-W55-	*	Tier 3		
	701, V-250-W55-703, H-250-W55-703	*	*		
	HE-250-W55-901, BE-250-W55-901 DD-250-W55-101/T-250-W55-105		Tier 3		
	T-250-W55-102				Tier 3
	DD-250-W55-302, H-250-W55-304, FD-250-W55-301, GR-250-W55-301, H-250-W55-305, FD-250-W55-403, CV-250-W55-401, CV-250-W55-403, CV-250-W55-404/405, PE-250-W55-401/402, MS-250-W55-401, H-250-W55-402/403, CV-250-W55-501,				*

EU	Emission Point	Cr(III)	Cr(VI)	Cu	HNO ₃
	DD-250-W55-1015				
	MM-250-W55-401/402, CV-250-W55-402, EPD-250-				
	W55-401, DD-250-W55-401, H-250-W55-401, FD-				
	250-W55-406, VS-250-W55-501, BE-250-W55-501,				1^{st}
	H-250-W55-501, BE-250-W55-1020, VS-250-W55-				
	1020, H-250-W55-1020				
	HT-250-W55-401				2^{nd}
	FD-250-W55-703, SSU-250-W55-1016, SSB-250-		1 st		
	W55-1017		1		
	CV-250-W55-1015, BE-250-W55-801B, H-250-W55-		1 st		*
	801B		1		-
	HT-250-W55-801B as 801 carrier	3 rd	Tier 3		
250-	DD-250-W56-950, DD-250-W56-951, H-250-W56-	1 st	2 nd	2 nd	
W56	952, H-W56-953, VS-250-W56-956, SS-250-W56-957	1	4		
	CV-250-W56-954, CV-250-W56-955	1 st	2^{nd}	1 st	

^{*}This emission point can meet the de minimis value without a control device.

For emission points with potential controlled TAC emissions above the de minimis levels, the source performed a tier 3 analysis, resulting in the following risks and hazard quotients.

Emission Point	TAC	Location	Risk	Status	HQ	Status
HT-250-W55-801 and HT-250-	Cr(VI)	industrial	1.59	≤ 10.0	0.017	≤ 3.0
W55-801B as 801 carrier	Cr(VI)	unadjusted	0.88	≤ 1.0	0.009	≤ 1.0
DD-250-W55-101/T-250-W55-105	Cr(VI)	industrial	0.20	≤ 10.0	0.0021	≤ 3.0
DD-230-W33-101/1-230-W33-103	Cr(VI)	unadjusted	0.11	≤ 1.0	0.0012	≤ 1.0
T-250-W55-102	HNO ₃	industrial			1.44	≤ 3.0
1-230-W 33-102	ΠNO_3	unadjusted			0.36	≤ 1.0

- 7. The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.
- 8. The Bag Dump Station H-250-W55-301, L/W Alumina Feeder FD-250-W55-401 and the L/W Hercoflat Feeder FD-250-W55-402 were removed.

[&]quot;--" This emission point has no emissions of the specified TAC.

EU 251-W57: G84 Styrene System; Production of process catalyst pellets. Powder and liquid weighing, mixing, extrusion and pellet drying and calcining

251-W57 Applicable Regulations

Federally Enforceable Regulations						
Regulation Title Applicable Sections						
<u>7.08</u>	Standards of Performance for New Process Operations	1 through 3				
40 CFR 63 Subpart	National Emission Standards for Hazardous Air Pollutants	See Source-Wide				
VVVVV	for Chemical Manufacturing Area Sources	Specific Conditions				

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
<u>5.00</u>	Definitions	1 through 2	
<u>5.01</u>	General Provisions	1 through 4	
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3	
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5	
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6	

251-W57 Emission Points

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
T-251-W57-001	Dilution Tank, 500 gal	2006	7.08	NA	S-251- W57-003
BD-251-W57-001 H-251-W57-001	Cerium Carbonate Bag Dump				
TT-251-W57-001	Hopper Cerium Carbonate Tote	1			
BD-251-W57-001		1			
	Iron Oxide Bag Dump	ł			
H-251-W57-002	Hopper	ł			
TT-251-W57-003	Iron Oxide Tote			DC-251-W57-001	S-251-
BD-251-W57-003	Potassium Carbonate Bag Dump	2006	· / ()X I	FIL-251-W57-001	W57-001
H-251-W57-003	Hopper	1			
TT-251-W57-004	Potassium Carbonate Tote				
BD-251-W57-005	Bulk Lime Bag Dump				
FD-251-W57-005	L-I-W Feeder				
TT-251-W57-002	Gypsum/Lime Tote				
BD-251-W57-004 venting BL-251- W57-001	Bag Dump, also venting Ribbon Blender	2006	7.08, 5.21, 40 CFR 63 VVVVVV	DC-251-W57-001 FIL-251-W57-001	S-251- W57-001
BT-251-W57-001	Blender 1 Tote		* * * * * *		
BD-251-W57-006	Bulk Cerium Carbonate				
	Bag Dump	2010	7.08	DC-251-W57-001	S-251-
FD-251-W57-006	L-I-W Feeder	2010	7.00	FIL-251-W57-001	W57-001
TT-251-W57-006	Wet Cerium Tote				
MX-251-W57-001	Plow Mixer	2006	7.08, 5.21, 40 CFR 63 VVVVVV	SEP-251-W57-002 DC-251-W57-004 FIL-251-W57-004	S-251- W57-004

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
MX-251-W57-002	Mixmuller	2010	7.08, 5.21, 40 CFR 63 VVVVVV	SEP-251-W57-003 DC-251-W57-004 FIL-251-W57-004	S-251- W57-004
DR-251-W57-001	Fluid Bed Dryer	2006	7.08, 5.21, 40 CFR 63 VVVVVV	SEP-251-W57-001 DC-251-W57-001 FIL-251-W57-001	S-251- W57-001
PD-251-W57-001	Dryer Product Drum	2006	7.00 5.21		
VS-251-W57-001	Vibratory Screener	2006	7.08, 5.21, 40 CFR 63	DC-251-W57-001	S-251-
CV-251-W57-100	Bucket Conveyor	2010	VVVVVV	FIL-251-W57-001	W57-001
H-251-W57-007	Surge Hopper	2006	* * * * * *		
FD-251-W57-003	Tote Feeder	2010			S-251-
HT-251-W57-001	Belt Calciner	2006			
CV-251-W57-003	Belt Conveyor	2006	7.00 5.21	DC-251-W57-004	
H-251-W57-008	Hopper	2006	7.08, 5.21, 40 CFR 63		
VS-251-W57-002	Vibratory Screener	2006	VVVVVV	FIL-251-W57-004	W57-004
H-251-W57-009	Hopper	2006			
CV-251-W57-005	Belt Conveyor	2006			
SSD-251-W57-001	Packaging System	2006			
DD-251-W57- 001/H-251-W57- 004	Rework Drum Dumper/Hopper		7.00 5.21		
M-251-W57-004	Rework Grinder	2006	7.08, 5.21, 40 CFR 63	DC-251-W57-005	S-251-
FD-251-W57-004	Rework Feeder	2006	VVVVVV	FIL-251-W57-001	W57-001
CV-251-W57-006	Rework Conveyor				
TT-251-W57-005	Portable Ground Rework Tote				

251-W57 Control Devices

Control ID	Description	Stack ID
DC-251-W57-001	Baghouse (95%), Flex-Kleen 43/54-PSTH-121	S-251-W57-001
DC-251-W57-004	Baghouse (95%), Air Pro, Model 43/54-PSTH-256	S-251-W57-004
DC-251-W57-005	Baghouse (95%), Flex-Kleen, Model 28/36-PVTL-25	S-251-W57-001
FIL-251-W57-001	HEPA Filter (99.97%), Flex-Kleen Model Magna/Pack	S-251-W57-001
FIL-251-W57-004	HEPA Filter (99.97%), Flex-Kleen, Model Magna-Pak	S-251-W57-004
SEP-251-W57-001	Dual Cyclone (95%), Fisher-Klosterman, Model XQ-465-25-2	S-251-W57-001
SEP-251-W57-002	Cyclone (95%), Fisher-Klosterman	S-251-W57-004
SEP-251-W57-003	Cyclone (95%), Fisher-Klosterman	S-251-W57-004

251-W57 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. $PM/PM_{10}/PM_{2.5}$

i. The owner or operator shall not allow or cause PM emissions to exceed the following limits. (Regulation 7.08, section 3.1.2) (See Comment 1.)

EP	Emission Limit (lb/hr)
T-251-W57-001, BD-251-W57-001, H-251-W57-001, TT-251-W57-001, BD-251-W57-003, H-251-W57-003, TT-251-W57-004, BD-251-W57-004, BL-251-W57-001, BT-251-W57-001, BD-251-W57-005, FD-251-W57-006, BD-251-W57-006, TT-251-W57-006	2.34 each
BD-251-W57-002, H-251-W57-002, TT-251-W57-003	2.43 each
MX-251-W57-001 and MX-251-W57-002	3.26 each
DR-251-W57-001, PD-251-W57-001, VS-251-W57-001, CV-251-W57-100, H-251-W57-007	3.81 each
HT-251-W57-001, FD-251-W57-003, CV-251-W57-003, H-251-W57-008, VS-251-W57-002, H-251-W57-009, CV-251-W57-005, SSD-251-W57-001, DD-251-W57-001/H-251-W57-004, M-251-W57-004, FD-251-W57-004, TT-251-W57-005	3.02 each

ii. See Source-Wide Conditions S1.a.

b. **Opacity**

See <u>Source-Wide Conditions S1.b.</u> (See Comment 2.)

c. HAP

See Source-Wide Conditions S1.c.

d. TAC

See Source-Wide Conditions S1.d. (See Comment 3.)

e. Control Device Operation

The owner or operator shall, to the extent practicable, operate and maintain the control devices at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. (Regulations 2.04, 2.05, 5.00 and 5.21, Regulation 7.08 section 3.1.2, and 40 CFR 63 Subpart VVVVVV)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

i. For any period of time when the process was operating and a PM control device was not operating, the owner or operator shall maintain the following records:

- 1) The duration of the control device downtime;
- 2) The process throughput during the control device downtime;
- 3) The emissions of PM (lb/hr) and PM/PM₁₀/PM_{2.5} (tons); and
- 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.b.

b. **Opacity**

There are no monitoring or recordkeeping requirements for this emission unit.

c. HAP

See Source-Wide Conditions S2.e.

d. TAC

- i. For any period of time when the process was operating and a TAC control device was not operating, the owner or operator shall maintain the following records:
 - 1) The duration of the control device downtime;
 - 2) The process throughput during the control device downtime;
 - 3) The emissions of each TAC (lb/hr and lb/avg. period); and
 - 4) Summary information on the cause of the event, corrective action taken, and measures implemented to prevent reoccurrence.
- ii. See Source-Wide Conditions S2.f.

e. Control Device Operation

- i. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of DC-251-W57-001, DC-251-W57-004, DC-251-W57-005, FIL-251-W57-001, FIL-251-W57-004, SEP-251-W57-001, SEP-251-W57-002 and SEP-251-W57-003 for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- ii. The owner or operator shall monitor and record the pressure drop at least once during each operating day to ensure it is maintained within the operating range as shown in the table below.

Control ID	Pressure Drop (" w.c.)
DC-251-W57-001, DC-251-W57-004, DC-251- W57-005	1.0 – 6.0
FIL-251-W57-001, FIL-251-W57-004	1.0 - 7.0
SEP-251-W57-001, SEP-251-W57-002, SEP-251-W57-003	1.0 – 15.0

- iii. For any period of operating outside the established performance indicator range for DC-251-W57-001, FIL-251-W57-001, DC-251-W57-004, FIL-251-W57-004 and/or DC-251-W57-005, the owner or operator shall maintain the following records:
 - 1) The date,
 - 2) The observed performance indicator value,
 - 3) Corrective action taken to minimize the extent of the excursion, and measures implemented to prevent reoccurrence.
- iv. Upon notification to the District, the owner or operator may modify the pressure drop ranges for DC-251-W57-001, DC-251-W57-004, DC-251-W57-005, FIL-251-W57-001, FIL-251-W57-004, SEP-251-W57-002, and/or SEP-251-W57-003 once during the life of this permit 27755-14-TV, based on plant operating trends. Records of the operating trends that necessitated a change shall be kept for the life of the control device.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

- i. Identification of all periods when a process was operating and an associated control device was not operating, including the information in S2.a.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.
- ii. See Source-Wide Conditions S3.a.

b. **Opacity**

There are no reporting requirements for this emission unit.

c. HAP

See Source-Wide Conditions S3.c.

d. TAC

i. Identification of all periods when a process was operating and a TAC control device was not operating, including the information recorded in S2.d.i., or a negative declaration if the control device was operating at all times the process was operating during the reporting period.

ii. See Source-Wide Conditions S3.d.

e. Control Device Operation

Identification of all periods of operating outside the established performance indicator range for a control device, including the information recorded in S2.e.iii. If there were no excursions during the reporting period, the compliance report must include a statement to that effect.

251-W57 Comments

- 1. The potential controlled hourly PM emissions from EP BD-251-W57-002, H-251-W57-002, TT-251-W57-003, MX-251-W57-001, MX-251-W57-002, DR-251-W57-001, PD-251-W57-001, VS-251-W57-001, CV-251-W57-100, H-251-W57-007, HT-251-W57-001, FD-251-W57-003, CV-251-W57-003, H-251-W57-008, VS-251-W57-002, H-251-W57-009, CV-251-W57-005, CV-251-W57-006, SSD-251-W57-001, DD-251-W57-001/H-251-W57-004, M-251-W57-004, FD-251-W57-004 and TT-251-W57-005 meet the applicable emission standard in Regulation 7.08 after the first control device. The potential uncontrolled hourly PM emissions from EP T-251-W57-001, BD-251-W57-001, H-251-W57-001, TT-251-W57-001, BD-251-W57-003, H-251-W57-003, TT-251-W57-004, BD-251-W57-004, BD-251-W57-004, BD-251-W57-006, TT-251-W57-002, BD-251-W57-006, and TT-251-W57-006 meet the applicable emission standard in Regulation 7.08.
- 2. The District has determined that no periodic visible emissions surveys are required for this emission unit.
- 3. The potential TAC emissions are below the de minimis levels in Regulations 5.00 and 5.21, with the listed levels of control.

Emission Point	Cr(III)	Cu
BD-251-W57-004, BL-251-W57-001	2 nd	1 st
BT-251-W57-001, CV-251-W57-006	2 nd	2^{nd}
MX-251-W57-001, MX-251-W57-002, DR-251-W57-001, PD-251-W57-001,	1 st	2 nd
VS-251-W57-001, CV-251-W57-100, H-251-W57-007, HT-251-W57-001, FD-		
251-W57-003, CV-251-W57-003, H-251-W57-008, VS-251-W57-002, H-251-		
W57-009, CV-251-W57-005, CV-251-W57-006, SSD-251-W57-001, DD-		
001/H-004, M-251-W57-004, FD-251-W57-004, TT-251-W57-005		

EU 252-Boilers: Three (3) natural gas fired boilers

252-Boilers Applicable Regulations

Federally Enforceable Regulations			
Regulation	Title	Applicable Sections	
<u>7.06</u>	Standards of Performance for New Indirect Heat Exchangers	1, 2, 3, 4, 5, and 8	
40 CFR 60,	Standards of Performance for Small Industrial-Commercial-	60.40c, 60.41c, 60.48c	
Subpart Dc	Institutional Steam Generating Units	(g)(2)	

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
NA	NA	NA	

Emission Point	Description	Construction Date	Applicable Regulations	Control Device	Stack ID
Boiler 7	Natural gas fired boiler, 25.2 MMBtu/hr	1973	7.06	NA	S-212-Boil-001
Boiler 8	Natural gas fired boiler, 58 MMBtu/hr	1988	7.06, 5.21	NA	S-212-Boil-002
Boiler 9	Natural gas fired boiler, 72.2 MMBtu/hr	1995	7.06, 40 CFR 60 Subpart Dc	NA	S-212-Boil-003

252-Boiler Control Devices: There are no control devices associated with this Emission Unit.

252-Boilers Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. PM/PM_{10}

- i. For Boiler 7, the owner or operator shall not allow or cause PM emissions in excess of 0.45 pound per million Btu actual heat input capacity. (Regulation 7.06, section 4.1.3)
- ii. For Boiler 8, the owner or operator shall not allow or cause PM emissions in excess of 0.18 pounds per million Btu actual heat input capacity. (Regulation 7.06, section 4.1.4)
- iii. For Boiler 9, the owner or operator shall not allow or cause PM emissions in excess of 0.13 pounds per million Btu actual heat input capacity. (Regulation 7.06, section 4.1.4)
- iv. See <u>Source-Wide Conditions S1.a.</u>

b. **Opacity**

The owner or operator shall not allow or cause visible emissions to exceed twenty percent (20%) opacity, except: (Regulation 7.06, section 4.2)

- i. For indirect heat exchangers with a heat input capacity of less than 250 million BTU/hr, a maximum of 40% opacity shall be permissible for not more than two consecutive minutes in any 60 consecutive minutes;
- ii. For indirect heat exchangers with heat input capacity of less than 250 million BTU/hr, a maximum of 40% opacity shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire box or blowing soot; or
- iii. For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

c. SO_2

- i. For Boilers 7 and 8, the owner or operator shall not allow or cause to be discharged into the atmosphere from any affected facility any gases which contain SO_2 in excess of 1.0 pound per million Btu actual heat input capacity for combustion of liquid and gaseous fuels. (Regulation 7.06, section 5.1.1)
- ii. For Boiler 9, the owner or operator shall not allow or cause to be discharged into the atmosphere from any affected facility any gases which contain SO₂ in excess of 0.97 pound per million Btu actual heat input capacity for combustion of liquid and gaseous fuels. (Regulation 7.06, section 5.1.3)

d. HAP

See Source-Wide Conditions S1.c.

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. $PM/PM_{10}/PM_{2.5}$

See Source-Wide Conditions S2.b. (See Comment 1.)

b. **Opacity**

There are no compliance monitoring or recordkeeping requirements for EU 252-Boilers. (See Comment 2.)

$c. SO_2$

- i. The owner or operator shall record and maintain records of the amount of natural gas combusted during each calendar month. (40 CFR 60.48c(g)(2)) (See Comment 1.)
- ii. For Boiler 9, as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the owner or operator may record and maintain records of the total amount of natural gas delivered to the property during each calendar month. (40 CFR 60.48c(g)(3))

d. HAP

See Source-Wide Conditions S2.e.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. $PM/PM_{10}/PM_{2.5}$

See Source-Wide Conditions S3.a.

b. **Opacity**

There are no compliance reporting requirements for EU 252-Boilers.

$c. SO_2$

There are no compliance reporting requirements for EU 252-Boilers.

d. HAP

See Source-Wide Conditions S3.c.

252-Boiler Comments

1. The potential uncontrolled PM and SO₂ emissions are below the applicable emission standards in Regulation 7.06.

- 2. The District has determined that combusting natural gas will not cause an exceedance of the opacity standard. The company is not required to perform periodic monitoring to demonstrate continuous compliance with the opacity standard when combusting natural gas in the boilers.
- 3. As of the 2012 plant inspection, the facility was planning to remove the 30,000 gallon underground No. 4 fuel oil storage tank, installed in 1994, and lock out the fuel feed system for the #8 boiler.
- 4. The TAC emissions from the combustion of natural gas are considered to be "de minimis emissions" by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler. (Regulation 5.21, section 2.7)

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EU 201-GASTK: Gasoline storage tank

201-GASTK Applicable Regulations

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
6.15	Standards of Performance for Gasoline Transfer to Existing			
<u>6.15</u>	Service Station Storage Tanks (Stage I Vapor Recovery)	1 through 3		
6.40	Standards of Performance for Gasoline Transfer to Motor	1 and 2.2.1		
0.40	Vehicles (Stage II Vapor Recovery and Control Systems)	1 and 2.2.1		
40 CFR 63	National Emission Standards for Hazardous Air Pollutants	§§63.11111,		
Subpart CCCCCC	for Source Category: Gasoline Dispensing Facilities	63.11115.63.11116		

	District Only Enforceable Regulations			
Regulation	Title	Applicable Sections		
<u>5.00</u>	Definitions	1 through 2		
<u>5.01</u>	General Provisions	1 through 4		
<u>5.14</u>	Hazardous Air Pollutants and Source Categories	1 through 3		
<u>5.21</u>	Environmental Acceptability for Toxic Air Contaminants	1 through 5		
<u>5.23</u>	Categories of Toxic Air Contaminants	1 through 6		

201-GASTK Emission Points

Description	Construction Date	Applicable Regulations	Control Device	Stack ID
Gasoline Storage Tank, 2000 gal		6.15, 5.21	NA	Fugitive

201-GASTK Control Devices: There are no control devices associated with EU 201-GASTK.

201-GASTK Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

- i. The owner or operator of an affected facility (gasoline storage tank) shall install, maintain and operate the following devices on the storage tanks: (Regulation 6.15, Section 3.1)
 - 1) Submerged fill pipe;
 - 2) If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank:
 - 3) Vent line restrictions on the affected facility; and
 - 4) Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50 percent of the liquid fill hose, cross-sectional area for each tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size and design of the vapor balance system are subject to the approval of the District.
- ii. The owner or operator may elect to use an alternate control system, provided it can be demonstrated to the District's satisfaction to achieve equivalent control efficiency. (Regulation 6.15, Section 3.2)
- iii. The owner or operator shall not allow delivery of fuel to the storage tanks until the vapor balance system is properly connected to the transport vehicle and the affected facility. (Regulation 6.15, Section 3.3)
- iv. No person shall deliver gasoline to a service station without connecting the vapor return hose between the tank of the delivery truck and the storage tank receiving the product. Also the vapor balance system must be operating in accordance with the manufacturer's specifications. (Regulation 6.15, Section 3.4)
- v. Truck tank hatch openings for the purpose of visual inspection are permitted for a period not to exceed one minute and only after pumping from that compartment has stopped for at least three minutes prior to the opening. All truck tank hatches must be closed during pumping. (Regulation 6.15, Section 3.5)
- vi. Except for above ground tank filling, all lines must be gravity drained in such a manner that upon disconnect no liquid spillage would be expected. (Regulation 6.15, Section 3.6)

vii. Above ground tanks shall be equipped with dry breaks with any liquid spillage upon the line disconnect not exceeding 10 ml. (Regulation 6.15, Section 3.7)

- viii. Equipment shall be operated and maintained with no defects and: (Regulation 6.15, Section 3.8)
 - 1) All fill tubes are equipped with vapor-tight covers including gaskets;
 - 2) All dry breaks have vapor-tight seals and are equipped with vapor-tight covers or dust covers;
 - 3) All vapor return passages are operated so there is no obstruction of vapor passage from the storage tank back to the delivery vehicle;
 - 4) All storage tank vapor return pipes and fill pipes without dry breaks are equipped with vapor-tight covers, including gaskets; and
 - 5) All hoses, fittings, and couplings are in a vapor-tight condition.
- ix. The owner or operator shall not exceed 10,000 gallons of throughput per month. (Regulation 6.40, section 2.2.1) (See Comment 1.)
- x. See Source-Wide Conditions S1.a.

b. **HAP**

- i. See Source-Wide Conditions S1.c.
- ii. For the affected source with a monthly throughput of less than 10,000 gallons of gasoline, the owner or operator must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: (40 CFR 63.11116(a))
 - 1) Minimize gasoline spills;
 - 2) Clean up spills as expeditiously as practicable;
 - 3) Cover all open gasoline containers and all gasoline storage tank fillpipes with a gasketed seal when not in use;
 - 4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- iii. Portable gasoline containers that meet the requirements of 40 CFR 59, subpart F, are considered acceptable for compliance with §63.11116(a)(3). (40 CFR 63.11116(d))
- iv. The owner or operator must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the District which may include, but is not limited to, monitoring results, review of operation and maintenance procedures,

review of operation and maintenance records, and inspection of the source. (40 CFR 63.11115(a))

c. TAC

See <u>Source-Wide Conditions S1.d.</u> (See Comment 2.)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

- i. The owner or operator shall monitor and maintain records of the throughput (in gals) of gasoline during each calendar month and consecutive 12-month period.
- ii. See Source-Wide Conditions S2.e.ii.

b. HAP

- i. The owner or operator shall monitor and document the monthly throughput of gasoline. Records required under this paragraph shall be kept for a period of 5 years. (40 CFR 63.11111(e))
- ii. See Source-Wide Conditions S2.e.ii.

c. TAC

See Source-Wide Conditions S2.f.

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit semi-annual compliance reports in accordance with General Condition 12.

a. **VOC**

- i. The owner or operator of the facility shall submit records to the District by April 15 of each year, demonstrating that it met those conditions in S1.a.ix. during the previous calendar year.
- ii. See Source-Wide Conditions S3.a.

b. HAP

- i. See Source-Wide Conditions S3.e.i. and Source-Wide Conditions S3.e.ii.
- ii. The owner or operator is not required to submit notifications or reports as specified in §63.11125, §63.11126, or 40 CFR 63 subpart A, but must have records available within 24 hours of a request by the District to document your gasoline throughput. (40 CFR 63.11116(b))

c. TAC

See Source-Wide Conditions S3.d.

201-GASTK Tank Comments

1. A gasoline dispensing facility whose average monthly throughput does not exceed 10,000 gallons of gasoline is exempted from Regulation 6.40, Sections 3 through 6.

2. Pursuant to Regulation 5.00, Section 1.13.1, a gasoline dispensing facility subject to Regulation 6.40 is an exempt stationary source under the STAR regulations.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

There are no Off-Permit Documents associated with this operating permit.

Alternative Operating Scenarios

The source did not request to operate under any alternative operating scenarios.

Insignificant Activities

Description	Quantity	Basis (Regulation 1.02)
EU 215-W50, Wastewater Treatment System; Collection, chemical precipitation, pH adjustment and equalization of plant wastewater prior to discharge to MSD, de minimis under Regulation 5.21 Section 2	1	Section 1.38.1.1
Lab ventilating and exhausting systems for nonradioactive materials	7	Appendix A, Section 3.11
Research & Development	1	Appendix A, Section 3.27

EU 215-W50 consists of the equipment in the following table. The potential sulfuric acid emissions are less than the de minimis levels in Regulations 5.00 and 5.21.

Emission Point	Description	Construction	Stack ID
T-215-W50-002	H ₂ SO ₄ Tank, 50,000 lbs	1994	S-215-W50-002
T-215-W50-005	pH Adjust Tank, H ₂ SO ₄	1994	NA

- 1) Insignificant Activities identified in District Regulation 1.02, Appendix A may be subject to size or production rate disclosure requirements.
- 2) Insignificant Activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
- Activities identified in Regulation 1.02, Appendix A, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) as the annual emission for each piece of equipment.
- 6) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.

7) The owner or operator shall annually submit an updated list of insignificant activities, including an identification of the additions and removals of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.

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Protocol Checklist for a Performance Test

A completed protocol should include the following information: ☐ Facility name, location, and ID #; ☐ Responsible Official and environmental contact names; ☐ Permit numbers that are requiring the test to be conducted; \square Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5); ☐ Alternative test methods or description of modifications to the test methods to be used; □ Purpose of the test including equipment and pollutant to be tested; the purpose may be described in the permit that requires the test to be conducted or may be to show compliance with a federal regulation or emission standard; ☐ Tentative test dates (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.); ☐ Maximum rated production capacity of the system; □ Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits); Method to be used for determining rate of production during the performance test; ☐ Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance; Description of normal operation cycles; Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate; ☐ Process flow diagram; ☐ The type and manufacturer of the control equipment, if any; ☐ The control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test. Note that this data will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; ☐ How quality assurance and accuracy of the data will be maintained, including; Sample identification and chain-of-custody procedures o If audit samples are required for this test method, audit sample provider and number of audit samples to be used ☐ Pipe, duct, stack, or flue diameter to be tested; □ Distances from the testing sample ports to the nearest upstream and downstream flow disturbances for outlet and inlet (if required); Determine number of traverse points to be tested for outlet and additionally for inlet (if required) using Appendix A-1 to 40 CFR Part 60; o Method 1 if stack diameter is >12", Method 1a if stack diameter is greater than or equal to 4" and less than 12", Alternate method of determination for <4" If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Method 1, Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria. The Stack Test Review fee shall be submitted with each stack test protocol.